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FIGURE 268

GAATCTGTTCCAAAAAAAAGCTTAAGAAGTCTTAGATTACAGNTAACGCATATTCTAA
ATACTATGTGATGAATTATTCTCTTATGTTAAAAAAATATTAATTGGACCCAANTATGAC
TGTGGGTATTCTGCCAGGGAAGAAGAGCTAGGAGGTTAACCTTACCTGGANTTGCTGCT
TTGTTTCTATGCCTCTTGACAGAAGGATTATTCACCCGAAATATTAGCCATAATGCC

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FIGURE 269

CACTAGGAAAAATTGAAATNCTATTGGAAATTNTTTGCCACAAAGGTAAATAGGTNTACCA
GGGGAAACAGGCATCAAGAAAATTGCCCAATTAAAACAATAGGGTTATTGAGTAGTTG
AGTTAAGAAATGAAAACCACAAATTGGTGGAACTTAAACACCACAGTCTATTGTGTGA
ATTCTCAGGNTTATTATAGTCATGATAAAATCAATTTCATGTCTANTTGTTTCTT
CAACAAGTGATCTATCTTACAAAAGGGAATATTGCTGGAGAAATGCTCATTGTTCCCT
TCTGTATGTCTTGAGGGTAATGCTAAAAGCAAGCTCAAATTCAAATATGTTATTAA
ATATTATAGGATTGTTAAANTTATAGTTCAAGGATTGTCTTGTTCTTGGATT
CTGATTAAGTGATTTAATGTATTCTTAAAATATTATTGGCACATTGTATTGTACAT
ATTGATGGATAAAATTGATGCTCTGTACATATATATTGGCATAATCATCAAATTGGTA
TTTAGCTATTCACTACCTCATTCAATTCTTATGGTGAGAACATTCAAAGTCTC
TCTTCCAGCTATTATAATATTATAC

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FIGURE 270

TTCGGAAGAACCTCAGAGGGATTAAGCTCCTGAGAATGTTACCTGCANTATACTGATGG
CGTGCCAATAGATATCACAGTGAAGTTGATGGTCTTCCCTGNACATNTCAACATTNTTGAAC
CACTTAATCCTCTNTTGACAACACTAGTAGAACAGAACCTGAAGATATGGGAGACCTATAACC
TAGATGTTGCTGAAGCTTTCTGGATGTTGGTGAATATAATTCTGCACTTCCCCTCCTCAGTG
CTCTTGTGCTCTGAAAGATAAACCTGCAGTAGTTGGCTTCGTATGCAGAACATGTTAA
AGGCCCTAGGCTATATGGAGCGAGCTGCTGAAAGCTATGGCAAGGTGGTTGATCTGGCCCCAN
TCCATTGGATGCAAGGATTCACTTCTACCCCTCAGCAGCAGCTGGGCCAGCCTGAGAAAG
CTCTGGAAGCTCTGGAACCAATGTATGATCCAGATACTTACAGCACAGGATGCAAATGCTGCAC
AGCAGGAANTGAAGTTATTGCTTCATCGTTCTACTCTGTTGTTTACAAGGAAAATGTATG
GTTATGTGGATACCTACTATGTTAGCCATGCTTTAAAGGTAGCAATGAATCGAGC

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FIGURE 271

TGGTTTTGCCCCATAAATTCCCTCAGCTTGAGCAGTTGTTAAGGAATGAGGTTACAGATTC
AGGAATTNTAGGN CCTCAACCTNTAGANTTGTCCAAATGTTCTCCGACATGCAGTAGATGG
GAGACAAGAGGAGATT CCTGTGGTCATCGCTGCATNTGAAGACAGGCTTGGGGGGCCATTGC
AGCTATAAACAGCATT CAGCACAACACTCGNTCCAATGTGATTTCTACATTGTTACTCTCAA
CAATACAGCAGACC ATNTCCGGCCTGGNTCAACAGTGATTCCCTGAAAAGCATCAGATA
AAATTGTCAATT TTGACCC TAAACTTTGGAAGGAAAAGTAAAGGAGGATCCTGACCAGGGGA
ATCCATGAAACCTT AACCTT GCAAGGTTCTACTTGCCAATTCTGGTTCCCAGCGCAAAGAA
GGCCATATACATGGATGATGATGTAATTGTGCAAGGTGATATTCTTGCCCTTACAATACAGC
ACTGAAGCCAGGACATGCAGCTGCATTTCAGAAGATTGTGATT CAGCCTCTACTAAAGTTGT
CATCCGTGGAGCAGGAAA

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FIGURE 272

CCGGAAACCATGAGGTAAATGCCNCAATGGCATATTGTAATGTCATTAAACATTGGTAGGC
CTTGGACATGATGCTGNATTACNTCTCTTAAAATGACACCCTCCTCGCCTGGTGCTG
GCCCTTGGGAGCTGGAGCCCAGCATGCTGGGAGTGCAGCTCACACAGTAGTCCCCA
CGTGGCCCACCTCCCAGGCTGCTTCCGTCTCAGTTCTGTCCAAGCCATCAGCTC
CTTGGGACTGATGAACAGAGTCAGAACGCCAAAGGAATTGCACTGTGGCAGCAGACGTAC
TCGTCATAAGTGAGAGGCCTGTTGACTGATTGACCCAGCGCTTGAAATAATGGCAGTG
CTTGTTCACTTAAAGGGACCAAGCTAAATTGTATTGGTCATGTAGTGAAGTCAAAGTGT
ATTCAAGAGATGTTAATGCATATTAACTTAAATGTATTTCATCTCATGTTTCTTATTG
TCACAAGAGTACAGTTAATGCTGCGTGCTGAACCTGTTGGGTGAACGGTATTGCTGCT
GGAGGGCTGTTGCTCCTCTGTCTGGAGAGTCTGGTCATGTGGAGGG

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FIGURE 273

TGAAGTTGAATTGAATGATATGAGGNNTTCTTCCCAAGGTCNACCAGGACCAAGATTNTTT
TATAGTTATAAGCCTTGAAAGAAATTCTTGCAAGGTGTTGGACNCTTACTNAAGCAGAGAAGA
TGTCCCTTGAAAACTCAGAAACGAACCTTGGTACAGAAAATCAGTATTAAAGGCCAGAACTTA
TTGAAAGCGCAATGTACTTCTACCGTGCACGGGGATCCCACCNTCCTAGAACACTCGGAAGAG
ATGCTGTGGAATCCATTGAAAAAAATCAGCAAGGTGGAGTGCGGATTTGCAACAATCAAAGATC
TGCAGAGACCACAAGCTGGACAACCGCATGGAGTCGTTCTTCCTGGCCGAGACTGTGAAATACC
TCTACCTCCTGTTGACCCAACCAACTTCATCCACAACAATGGGTCCACCTTCGACGCGGTGA
TCACCCCCCTATGGGGAGTGCACTCCTGGGGCTGGGGGTACATCTCAACACAGAACGCTCACC
CCATCGACCCCTGCCGCCCTGCACTGCTGCCAGAGGCTGAAGGAAGAGCAGTGGAGGTGGAGG
ACTTGATGAGGGAATTCTACTCTCAAACGGAGCAGGTCGAAATTCAGAAAAACACTGTTA
GTTCGGG

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FIGURE 274

TATGGGCATAGAAAACCCTGGAAAGNCCATCCACCATTATATATAGAGTGATTGTCTNTGCT
TGNTGAGCTAACAGGGGTGTCAAGCTTCATTTGGTATCTACTTCTAAATACACTCAGACCA
GGAGAAATTGGACTAATTTCAAACACTACAGACACTTCTAATCATGATGCATTCAAAAGTG
GACTCGAATTAAC TGAGTTGCAAAACATGACAGTGCCCGAGGGATGATAACATTAGCAATGACT
CCAATGATTCAACCGAAGTAGAAAATGGTCAGATAAAATAGCAAGTTATTCAGTGTGAAA
GTAGAAGAAGTCTCACAAACAGCCATTGGAAAAAAAAGAAGTGTGATGAGTATATTCCAGGTA
CAACCTCCTAGGCATGTCTGTTAACCTAACGCAACGCCATTATGGCAGTGGGATTTGG
GACTCGCCTTGCCTGGCAAACACTGGAATCCTACTTTCTGGTACTTTGACTTCAGTGA
CATTGCTGTCTATATATTCAATAAACCTCCTATTGATCTGTTCAAAAGAAACAGGCTGCATGG
TGTATGAAAAGCTGGGGAAACAAGTCTTGGCACCACAGGGAAGTCGTAATTTGGAGCCA
CCTCTCTACAGAACACTGGAGCAATGCTGAGCTACCTCTTCATCGAAAAATGAACTACCCCT
CTGC

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FIGURE 275

TGGGACACGGGTTACCCAAGNGCAGCGCTGGCAAGGCCTTCATGATNTCGGTGTGCTCTACG
TGACCAATTCCCACCTGGNTGGGGCAAGGTCTACTTCGCCTATTTACCAACACGTCCAGTTA
GAGTACACGNACGTGCCCTCCACAACCAGTATTCCCACATCTGATGCTGGATTACAACCCCC
CGGGAGCGGCCCTCTACCTGGAACAAACGCCACCAGGTGCTCTACAATGTACCCCTGTT
CACGTACATCAGCACCTCTGGGGACCCCTGAGCCAATGCTGTGGCTGGCTGCCTGGGG
GCCTCCGGGGCTGGGGGCCCTTTCAATTCTGCCTGTCCCTCAAGGGTGATCTCTGTCT
CTGTCACGCCCTTCTCCCCGCCTTTGCTGGCTTTGTTCTGCCTATGTATTCTGTC
TATTTTTCAATTCCCCCTCTCCTTATTGATCTGCTTTAATACACCACTCTTCT
TTCTGCCTTTATGGATGTCTTTCTTTATGGCTCTGGTTCTCCAGTTCTCCGTCTC
TGCCTCTCTGTCTCTCTCTGTCCCTCCACCCCTCCCTGCCTCCC

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FIGURE 276

CGAANGCGTGGGTGTGCATCCGGGTNTGAAGGCTGTGCCCTTTGTTCTGGCTAAAAT
CGGGGGANTNAGGCAGGGCCGGCNCGGCGACACCGGGCTCCGAACCACTGCACGACGGGN
TGGACTGACCTGAAAAAAATGTCTGGATTCTAGAGGGCTTGAGATGCTCAGAATGCATTGAC
TGGGGGGAAAAGCGCAATACTATTGCTTCCATTGCTGCTGGTGTACTATTTTACAGGCTGG
TGGATTATCATAGATGCAGCTGTTATTATCCCACCATGAAAGATTCAACCACTCATACCAT
GCCTGTGGTGTATAGCAACCATAGCCTCCTAATGATTAATGCAGTATCGAATGGACAAGTC
CGAGGTGATAGTTACAGTGAAGGTTGTCTGGGTCAAACAGGTGCTGCATTGGCTTTCGTT
GGTTTCATGTTGGCCTTGGATCTCTGATTGCATCTATGTGGATTCTTTGGAGGTTATGTT
GCTAAAGAAAAAGACATAGTATACCCTGGAATTGCTGTATTTCCAGAATGCCTTCATCTT
AAT

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FIGURE 277

AGTTTCCTTAAATTGGGTNGGGTGTAAAGCNCTGAAAATATCTTCNTGATTACTTACC
ATGTGGACATATGGGATAAAATACTGTATTCAGATTACATAAAAGTAGATTAGTAATGCNCA
GCTTCAGAATAAAAAGTGTAAAAAGACCAAGCACTATCAACTTTGGACAGTAATTCTTA
GGTGTAAACAAGTTCTGAATACAATCTGGATGCAAAACGGCCTGATTTGATGAATTCAA
ATTTCTCTGNANACTTCATTTATTAAATATTTATTACTTGGTTAACNCNAGAATTAT
CTATGTAAACCTCATGGGNTTTTGTGAAAGTTAGATGTTAGTAACTAATTCCCAGTTA
TGGCCCAGAATTAAACATTATGATCATATTCAGAAGTCAAAATNCAAAACGGATTATCAA
AACGGTTGGTGTGGTCNCTTTAAACTGGACTATCAGTATGGTTGCCGTGGTCACTTAACCGG
GATTATCAGTACGGTTGGTGTGGTCACTTGGTTATCATCAATAACAGTTGGTGTGGTCACCT
TAAACTGGATTACCNATATGGTTGGTGTGGTCGTTAAAGTTGNTTCATTTTTCTATT
TTAATTNTTAC

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FIGURE 278

TTGGTTTCTGTCCTGNGTAGTTGCTGACTTAAGAGGATACAGACTTGAGGTATAATTT
GTCTTAGTCAGTTGTGTTGCTATAACAGAATACCTGAGACTAGGTAATTATAAAAATAAA
GTTTATTTGGCTCATGATTNTGGAGCTGGAAAGTCNAGATTGGGCAGCCCATATGATGAGGGT
TGCACACTNTTCNATTATGGCAGAAAGTGGAAANGGAAGCAGGTGTGTCCAAANAGACATG
CAGGAGAGGTTGGAGTCANTGCTCTCAGGAANTAATTCTATTCTNTAGAGAGTGAGAACTCA
CTTAACTNTTGCNAGAGGGCATTAAATCTATTCACCCATGAAACNAACACCNCAGTAGACTC
CACCATTTAACACTGCCATATTGGGAATCAAATTCAACATGAGTTTGGCANGGG

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FIGURE 279

CCTTTGGAAACTGGGATTAATGTATGCTCTAGATCCATTATTAGAAATGC
AAAAACTAC TACA
ATTTTTGATGGATGAAAATACTCCTGTAACACAAACAGAGAACTGGAGGA
ACTGAAGAATAA
CTCACTCATATAGNTCTGCCTCATTCTGTGTGTGCATGTGTGTTANCAGAGGT
ATTT
TACTCAGAAAATAGGTTCAAAGAACATTAATGACTTCTTCCCTTTANGTNTGNT
TAAT
CAGTTAAACTGNTATGGAAAAGTTTATAGAACTATATAACCTGAATGTTGGTCT
TTTGNA
CACATNTTTNTATGACTGC

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FIGURE 280

TGTGGTCCTAATATCATAGATCACTTANATGTGATTGTTCAGTTGTTGACACTTGCCCTGC
ACGGACACCCACATCCTGGGCCTTTAGTTACCCCTAACAGTGGATGATGTGTGGCCATC
TTTCTTATNTTAANTGNGTCTACACGGTCATCCTANGCTCCCTGAAGTTTACAGCTTAAA
NGGCAGGACAAAGCCCTNTACCTGCAGNTNCCACCTCACGGTGGTTGTANTGTTCTTGTCCC

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FIGURE 281

TGGTTCCAGGTCAACCATCCTAGCNTCAAATTCAAAATGGTTGCTTCTACCTCCAGCCTGA
TATCCTTGTGATGGGCAGGCAGAACCAAGGGCTNTAAGGAAAGGAGGCCAGCACCTGTATCAAGA
AGCCAAAGCCTTCCCTGAAATCTTAGCAGACGTCTGCTTGACTATTTGGCTAGAACTTTG
TGACATGGCCACTCCNTGCTGCAAGGACATTTACAGTTTCAGTTGGGCCATTGCCACCC
GAGCAAAGGGTCNATAAGGAAGAACGGAGAGTGGACATGTTGGGCATTCACCTGCCAGCAC
TCCATCCAGACAGCCNCANAANTGGTGGGTAAACAGAGACAGCATACATTCACTTATCAACTG
TTTAGTAAATTCTGGCATGGCA

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FIGURE 282

AGCCCAGATCCAGGAACCATT CCT ATTTCAGGATTTGAATGC
AAAGATGAATGTCAGGGAGAGATTATTCAACCC TGAGATTTGCAGTCTC
CAGAATAGATTAAGGCCTGATGATACTCAAAGGC
CTGGAAA
ACTGATGNCAA
AGAATTTC
GTGCC
CTGGCAC
CTCATTGCAGTGACTNT
GGGATC
CTCGNTTACTCTTCTGATGATAGC
NCAGTGTG
GGTGACA
AAATATCTTCAGTGNATT
CNAGAAAA
ACATCAACGG
CAGGAA
ATT
TA
AGAAA
ACTGTAGT
GAAAAGT
ACNTCAT
GC
AAAAT
GN
C
N
ACT
ACT
TAAA
ANAG
CAG
ATT
TGACA
AATA
AGACT
TTAAA
ATGAC
GTTNT
CAAAA
ATAGC
TT
CAG
CAG
AAA
AGGA
ACTGG
ATT
CA
CGC
CTT
ATA
CNA
AAAGAAC
AGATGT
CATAG
AGAAA
ATGAG
ATC
ATT
TTA
AAAG
TTTG
CAA
AT
ACAGG
CAA
ATT

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FIGURE 283

AGGAATGACCTCCTCAGGGGGCTGAGGATAACCCACAGGCCTCCTCTCCAGCTCCAGG
GTTGACTATGCACCTATTAGGGCTGCTGCTCAAGGGAGAGAGGTACAGGAGGTGGTCTG
GGAAAAACAAAATTGATCTCCTATCAATTGTATTTGTTAGCGGAATCTATACACACCCA
TTCTTGATATTATTCCAGTTACTCCAGCTAACAAATAATGATATTGCCCTCAGTTA
AGAACAGATTTATTTAGAACAGAAAGTCTAGTAGCAGTTGCTTTATTAACGTTTA
AGGAACATTACCTTAGATATCATGATTCTGGCATTGCAAATGCAGTCAATATCAAACA
GCAATGGTTGCTTGTATGATCGGTAGAATTGTCAGTATATTAAATTCA

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FIGURE 284

GCCCCGAGTTCTGTCGCAAGGTTGCGAGGAAAGGCCCTAGGCTGGTCTGGGTGCTGGCG
CGCGGGCTTCCTCCCCGCTNGTCCTCCCCGGGCCAGAGGCACCTCGGCTTCAGTCATGCTGA
GCAGAGTATGGAAGCACCTGACTACGAAGTGCTATCCGTGCGAGAACAGCTATTCCACGAGAG
GATCCCGAGGTGATTATATCAACACTTCTGTTGCAACACTGTACATCCTCTGCCACATCTT
CCTGACCCGCTTCAAGAAGCCTGCTGAGTTACCAACAGTGGATGATGAAGATGCCACCGTCAA
CAAGATTGCGCTCGAGCTGTGCACCTTACCCCTGGCAATTGCCCTGGGTGCTGCTGCTCCT
GCCCTTCTCCATCATCAGCAATGAGGTGCTGCTCCCTGCCCTCGGAACACTACATCCAGTG
GCTCAACGGCTCCCTATCCATGGCCTCTGGAACCTTGTCTCTTCTCCAAC

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FIGURE 285

ATTTAGATTGNATCTCTTCCCACATCAATCATGAATACTACATAAGGTAATATTTATAGTTGGAAA
GCATTGCTTAATATATTGAATCAATAAAATATTGATTCATATATTAAATTAAATTCTTATAATCTT
TACAGATTACAATACTGTGATGAGACTGTTCCCTGTAACTTTGATCCACACACAGAATTCTT
GGTCCTCAGAAGAAAACAGAACAAAGTCCAAAGAGACATTGGATTTGGTGTCCAAGGCATCTT
AAGACTTCTGGGGACAAGGATATAAGTTCTGGGAATTGACCAGTGTGCGCTCCATGCC
AACATGTATTTAAAAGTGTGAGCTAGAGTTGCAAAAGTTTATTGGAACAGTTCAATA
TTTGCTTGCAACTCTGTCACATTCTTACTTTTAATTGATGTTAGAAGATTCAA
TACCCAGAGAGACCAATTATATTACTCTGTCTGTTACAGCATTGTATCTTATGTACTTC
ATTGGATTTGCTAGGCGATAGCACAGCCTGCAATAAGGCAGATGAGAAGCTAGAACTTGG

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FIGURE 286

CGTTAANACGAGCCTGCCAGTAAATGTAGCCATCATGTTAGTAANGGCCTGCAAAACAGAT
TACCCCTCACCTTTCACTTAATTGTCTACCTATGAATCATTAATGNTTGTTGNTTTA
ATTCTGTGATAGGTAGGAAAGGATGGAACTCCTGGCAGACTAGTGTANAAAGTTTNGAAG
CAGGGTGAGTCTTGTACCTTGNGGTCTGTNTCACAGACACCTGTNTANTCCCTGACCCTT
TAAATGGTAACTTNTGCCTGTAGGAAATCTCCCTTGTGCTTAGGTCTTTCNTCTGTGA
GCTTAGATAAACNACCTAGTGTAAACCTTTAATAAGGGATTCACTTTAANACATGAG
AATTCAATTCAAAANTTGGNTTAGNTATTANTTANTCTACNTGGNTCTTTCAAGACAG
ATGTTCTCTCCTGGATTGTAAAAGTCGAATTCAAAGGATTTTANTTGTNAATANACTAACCT
TTCTCTGTAAAGNTGCCATNTGTGTANANACAGCTTGANTGCCTGACAAGAGGAAAATGTT
CCC

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FIGURE 287

AACTGTCTTAATGGCCCAGTTTACCAAGGGCTTGTGNTAAGGACATTAAC TTGTGCTCCC
CTCAGGGATGGTTTANTACTAGCTGTCA GAAAGCTATTGGGTATCCTAATGTGTTAATAGCT
GAAACTCAGCTGTAATTCTCTAAATACTTCAGCATTGCATTCTGTACANTGTGGTGCTT
TTCCNCCTGTANTGTTCTAACTGTAAGCTCCTAGGGGGCAGCAATTGGATAAATCTTTG
GTAAGTAGTTNTCAATAAAATATCTCCCTCCCCATACCCCTACCCGAAATNTTATANTGN
TTTACAAAACTTGGTCAAGAGTAGAAATATATCCAGGCAGATGTATATGCCATACAATAGCA
AGAACAGTAAAGCCAACTAATGATTTGAGTTAAAAATAGAAGGCNATTAAAATGNACTC
AAAGTTACATTAAGAAAAGCTTCACGGGGTAATATTGAAACAGTCACAAAGGTTAAGAAA
TACTGATAGCAGTTTGCTATTTAACATTGTAGTCATTGTACTTGAT

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FIGURE 288

GGATTTCGTAAGTAGTTAGAGATAGTCACATTTAAAAATTAAAGATCAAGCAAATGAAGC
TTATTTTANGTATTCATAGTATAAAAGACCTTCAGTAAATAGGTAATANTTTGTTTATTTC
TAGAAAACAGCTCCTTGAACACAGTGAGCTGGCTTTCACACATTGCAGTTGTTAGTGTTCAC
TGCCCTGCCATTTAATTATGAGGNTAAAGATGTTTGACACCGCACATGTGTGTTATGGN
TTCCNTGATANGCTNTNGACAGCTNTTGGCTGGNTTTNGCANAGTTNGTTGANAAGGT
TATCTTGGCATTAAACAGTGATGTCAATACAAGGTTATGCAAACCTCCGTAATCAATGGAG
CATATAAGGAGAATTAATAATTGCCTCAGGAAGAACTTTACAGTGGATCAAATACAGTAC
CACATCAGATGCTGTNTTGCAGGTGCCATGCCTACAATGGCAAGCATCAAGCTGTTACACT
TNATCCCATTGTGAATNATCCACATTACGAAGATGCAGACTTGAGGGGTNGGACAAAAATAGT
TTATTTACATATAGTNGAAAATNTGC

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FIGURE 289

TCCCTTAATTCCATAGACCCCGAAGGGGGTTCCCGGGTTGGAATCCATTAAATCCGGGCCAG
GGCTTGNTCCCGTGGTTAGGATTGGGGGTANAAATAAAANTCAGGTNTATTNTTACCAAG
TCAGTACNATTTAAAGAACATGTACTTGGTATATAATATATGGACTTCAGGAACCTTATTGGG
GTGGGGGGTTAATTTGCCTTACCCCTGTTCACTTCANATGATTAGGCTTTGCACCTTAGAA
TGAGAAACTTGTGACGTTAGTGTGTTCTACTAGCTTAATTGTANGTAGCAATGAATTGTG
AATCTTAGTGCAGTGGGTTTTAAAAACTCAAAAAGCTGGGAATTAAAGTGGTTCAGTAA
TAATGNTATACCGAGGTGCTTGCATTGTATTCATAATTTGNTACAAACCNAATTATTTT
AATGAGAACAGTNTGGGTTCANAGGTGTGATGCCAGAATGTATTTCGTACTGTTAGGCCCT
TGGAACAGATATCGGTGCTTTGAAAGATGAAAGAAATGCNATGGTGCTNTCANGCAAGG
TTGCAAACCTACCAAGAACATGCATAATAGTNTCACTTTCCCCAATAANAGATGNGTGTGACT
AGTTGGACTTTAACCTTAATGGGGTTGCATGTNTCCTANTGTTAATCATTGTCAGCTGC
AGTGACATGATCCACAGTNC

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FIGURE 290

GACTTGGAAAGAATTGGACCTAGTGGNTAGACCCAAGGNCCAAAGCCAANAATCGTGGGGGC
CCAGGAANCAGGAGGTNCATGGGATTCCAGACATAAGATCAGGTTTAACCCCTTGCCCC
AAATTTGGCTGAAAATGTTGAATTATCAACTCTGAAATTAAAAAGAAAGTTATATTAAAAC
ANTGCAATTTCCTTAGAATTCTGTATATATTAACATCATGAATGATAAATTCTCTTCAATG
TGCANGTCAGGTTTGNACTGNATATCAAATCTATCTGTGTATGAAGTGTATGTTATT
GAAATACNAGATATTAAGAACGCTGATNTGGAAAGTTGGATTTCATCTAGTTCTAATTCC
CAGAGGNTTTTAAAGGAAGGGAAATGTTGTGGTACNCCAGTTGTAGCTGGGTGGNTACTG
GATCATCTTCTTTATCAACNAGATNAACTATCAACTTCACCAGCATCATGAACCTTGNTGC
CGTAAAAAGGAGTTCACTACTTCTGTTCNCTTGAGTCTNTCAAATGGATTNTGTGTCCCTCC
TNTGGAGTNNGGCCATTANTGNTNTGACTNTCCNCTAAGCCAGAGAATGATGATGGAGG
AAATTATGAAATGTTCACNCGAAAATTGTTTGCACCTGAACCTGTTGANGTCAC

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FIGURE 291

AACCCATGGGCCAAGTCAAAAGCCNCAGGTTNTCCAGGCAGGGCATGGCATGGGTAG
GANCAGTGAACCTGGAAGTAATCCCAGCCTGCNGTCATTAGTGTGTACCTCAGGTAAAGGG
GGGGAAACCTACAGGACTGTTACAAGGATTAAATGAAGGAATTAAAGTGTGTGCATGTATNTG
GCATGTAGAAAATACAGTGTGGTGGGAGAGAACAGATTNTAGAACCAACTGCCTGAGTTCA
AATCCCAGTTNTGCTGCTTCCTGGCTGTGTGACCCCTGGCAAATCACTTAGCCTGTNTGGGNT
TCAGATTCTCATCTGACAATGAAGATAATNAAATACCTATCTTATGGTTGTAGTAAGGATT
AAATGAATTGAAATAAGNTTTAGATTAATACTTGATATGCTACATAGGTGTAGCCATTGT
TAATCANTGNTGTCAATTAGNTATTATCAACATGATTATTGCTNTAANAGGAACTCAGGCA
TTTGCAGGGTGTGGGAACCTGAGCTGGGTNTCCCTGTTGGGTGTGTCCCCATNATAC
CCTTAGGNCAACCCAGGTCAAGGTCAAGGGATGTGCCCTNTTCTGGNCCAGGTNTGTAA
GGCCANCAGCTTGCCTCATACGTGNGCAGCAGGTNGTTATGG

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FIGURE 292

CTAACCCCAGTTGAATTTGGAGCTTGTGGATTGCCATTGCCAGCCAAANTATGTTGGG
GAAAAGTNTNTGAGTGTCACTTGCNTGTTGAAGCTCTGGNTAATGTGATTATTGATCTGAGA
ATGAATCTTNNTAGNTATTCCAAACTTAGTTATTTGCAGTTGGTANTTTTCCTCAT
TGGAACCTCCAAAAATCCGATTGCTTGCCTGTTTATTCGCTGATAACTGATCCTT
CCTTGACATTATTTAGTGGACTTCAGTAAC TGAAAGATGGAAACCCTTTGNACCGTGG
AAGAATTGCAGAAGACTTCAGTCGTTGCTGGAATGATTGAGCTTACATTTTATTCT
TTCCGCATTCAAACCTAGAGACACTCACCTNTGGTATTTGTAANACCTGGNTTTCCATT
TGGAATTTNTGGATGATTGTCATANTATTTCTTTAATCTTTGGGGATTCCATACCNA
ATTAATGACTGCCATAAAGTATATTTACTCACAGGACAGATTACNATAGCCNTGATAGAAT
CATGGCATTCAAANGGATGCGCCATTTGNTTGATTCAGAGCAGTGGTGTNTTAGTNT
TNTTGCAACAGCGATTGGGAGCAGTTNCCG

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FIGURE 293

TCCAGGATTTCCTGGTNTAAGGTCTGGTCACACCCANAGGAACCAGTTGGTCTGG
GGCAAGCCACTGCCTATAGGATAAGGNAAGATCAAATAATCATNTCAGGGAGAACAGGNCC
AGCCTTCCTCCTCTATTCACTCAAACACACCACCCAAAGCACCCANTTGGCCAGACTCTGTGA
TGGTCCCTGCCCTCAAAGGACTGTTCATGGTCTAGAGATGAAAGAGCCCAGTCAACAGTTATA
CTGTGTGGTGGCGGGAGGGTAATCACAGGGTATTATGGGTACAAAAGGAGGCACCCCTG
ACCTCACCAAGAAATAGCTACCCCTGTGCCATAGGCTNTAGGCAGACTTACTGACATTGAANAN
CCTTTGCAGNCATTANAAAAAGACTACATGTGAAATGTGACAGAACAGGGATTGAGC
CTGAATGTTTANGCCTGCTTATCCTCATTGTCNCTGTGGAGGCAGAGGTGGGAAACTAA
GTNTAGAAGCCATNTGAGTNTGGGTGGGAGCCACCTNTATATTGTCATAAGTCTCTGATGGT
CCTTGTTCTAGCTATANCTGTGTCCACTAGTGC

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FIGURE 294

TTAAGGCCTTAAATGGTGGAAATTGGNACAATTATNCGAAATTAAATTAAAG
GAATTTGGAAAGTAGTTAAAGATAGCCNTTNAAAATTNTAAGATCAAGCAAATNAAGC
TTATTTAAGGATTCAAAGNATAAAAGCCTCAGTAAATAGTAAAATTGGTTATTNTA
GAAAACAGNTCCTTGACACAGTGAGTGGCTTCACACATTGCAGTTAATGGTTACTGC
CCTGCCATTTAATTATGAGGCTAAAGATGTTTGACACCGCACATGTGTATGGCTT
CCTTGATATGCTCTCGACAGCTTGGCTGGCTTCGCAGAGTCGTTGAGAAGGTTA
TCTTGGCATTTAACAGTGATGTCAATACAAGGTTATGCAAACCTCCGTAATCAATGGAGCA
TAATAGGAGAATTAAANAATTGCCTCAGGAAAAACTTTNCNAGTGGATCAAATNCAGTACC
ACATCAGATGCTGTCTTGCAGGTGCCATGCCTACAATGGCAAGCATCAAGCTGTNTACACTT
CATCCCATTGTGAATCATCCACATTACGAAGATGCAGACTTNAGGCCTGGTTGCAGTANGCTT
GAAATCTGGATGTGGAAGACCCTCCAATGCAGNTAACCCCTTANGTAGCGTCCTGNTC
GAAGACGCCAG

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FIGURE 295

TCCAAAAAAAATAATGGAAAAGTGGAAAGAGAAAATTGTTCAAAAACATAGCACACCT
GTTGTTAGATTCTTGTCTGCCTAANGTTTCATTTANTATTTCTACAGTTGGACCGA
ATTCTAATTTNTTGACTACAAGTNTCAAAATAATGNTTCANNTTTCTCTTTTCC
ATTTTTTCCAATTGGAGTCNCTGAAAACTAANCTGTGCTTCATAAAGCCCTGCAAACGTGA
ATCTAGACAACCTCAGAAGAAAAATNACAGCAACCTATTTACATACATAAGCCACTTCANAC
CTGCCCTACCGATGTATGGACTTCAGAGTAATGTGGNTTATAGCAATTTCAGGATTGNTCTT
TTGTTGNTGNTGTTCTCCCTCCCTCCCCCTATTTGTCTTATGGGACATGACACTTCACAA
CCTTNNTAAAATGAGTTTCCTAATAACTCAGGACCTACTNGTNTAGAAATNAACCACCTAG

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FIGURE 296

TTTTTTTCCCCTTGGGCCAGGTGGGTATGATAGGTGGGAANAGGGGCTTGAGG
CCGAGGCCGAGGCCGTGGACGAGGGAAAGGTGCCCTGCTNGCCCTGATTGACCAAGGAGCA
GCTGGACAACCAATTGGATGCATATATGTCAAAACNAAAGGACACCTGGATGCTGAGTTGGA
TGCCTACATGGNGCAGACAGATNCCGAAACCAATGATTNAAGCCTGCCATCCTNCCATGANA
GACTNTTGTAGTCAACACATCTGTAATAACCTTGAGATNACAGATGAGAAGAAATCTGATT
GATGCTGGATGGACCTATCACAATAGGCTGTGGACTTACTTGCCACCAGNTGTGCATTAGT
GTGTTCCCTTTACTTTGATACTGTGTTGTATGAAACCCCTTGTCCCTTGATTGGTTTT
TGNTTTGTTTTTANGGGGANGGGGGTTCCCTGCCAGACTNTCTTGAAAC
ACAAATGCATTAGCCTGTGGNTAGAACACCCTNTCCTACCTCTGTNTCCCC

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FIGURE 297

GGTAATGGAAAACCCGCAATTACATTGAACCAACCTAATAGATNTAAGGAAAGCGCTTCC
ATTCGTAGCATCAGTCTGCCACATCCCTGTGAGCCACTGCGCCGGCTTGGCCGTATT
TTTCCAATGCATTTGGAGCTTGGGTCACTAGTTTGTTCATGTGATGTCACCAACATGTT
GCCTATAACAGATTGAATATCCCTTATCCAAAATGCTGCAACCAGAAGTGTGGATTTG
GAATTTTTGGATTTGGAATATCTTCATGTAAATAATGAGATTGTTGGGATCAGACTC
AAGTCTAACATGAAATTGTTATGTTCATATATACTTATACACATACCTTAAAGGCAGT
TTTATACAGTATTTCAATGGGTGCATGAAACAAAGTTGTGTTCATGATCCATCAGAAAG
CAAAGATGTCACTGTCTCAGCCACACGTGGACAATCTGGTTGGTTAGCGTCCCCATCGTT

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FIGURE 298

GGCCCCGCGTGCACATGGAAAGTCTCTTCATTGCCCTTGCAATTCAAGCAAAGAAGA
TGCTTATGATGGAGTCACATCTGAAAACATGAGGAATGGACTGGTTAATAGTGAAGTCCATAA
TGAAGATGGAAGAAATGGAGATGTCTCAGTTCCATATGTGGAATTACAGGAAGAGATAG
TGTACACCTGCCCTACTTGTCAAGGAACAGGAAGAATTCCCTAGGGGGCAAGAAAACCAACTGGG
GCATTGATTCCATATAGTGTACAGAGATTAAGGCCAAGAAGAACAAAGCTGTATGTGATGGCT
TCTGTGTTGTCTGTACTCCTTCTGGATTGGCTGTGTTTCCCTTCGCTCTATC
GACGTGAAATACATTGGTGTAAAATCAGCCTATGTCAGTTATGATGTTCAGAAGCGTACAATT
TATTTAAATATCACAAACACACTAAATATAACAAACAATAACTATTACTCTGTCGAAGTTGAA
ACCGAACCCCT

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FIGURE 299

GAGCGGAGCCGGCGGAGCCTCTGGAATACCCGGGTCGCTGTTCTGAGCAGCTGCAGAGCAT
CGAGGGCTGGAGAGGAGCACATACTGTCCATGGAGCTGGTGGTCAAGGTGGACAGGGCGGTG
GTGATGGCGCAGTTGACACTGAATAACCAGCGCCTAGAGGCNTCCTATAGTGATTACCCCCA
GGGAGGAGGACCTGTTGGTGCACGTCGCCAGGGGAGCAAGTCACCTGGCACCATATTGAAA
ACCTTGACCTCTTCTCTCGAGTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGC
TCATCGGGGAGATCTTGAGCTCATGCAGTTCTCTTGTTGTGGTTGCCTCACTACCTCCTGG
TCAGCTGCGTGGACTATGACATCCTATTGCCAACAAAGATGGTAACCACAGTCTTCACCCCTA
CTGAACCCGTCAAGGTCACTCTGCCAGACGCCCTTTGCC

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FIGURE 300

TATGGAACAGCCTCCTTGACANCAGTTACGGGCTGGTGGCAGGGTCTGTTCTGGTCCT
GGGAGCCATCATCGGTGACTGGGTGGACAAGAATGGTAGACTAAAGTGGCCCAGACCTCGCT
GGTGGNACAGAATGTTCACTCATCCTGTGGAAATCATCCTGATGATGGTTTCTTACATAA
ACATGAGNTTCTGACCATGNACCATGGANGGGTTCTCACTCCTGNTANATCCTGATCATCAC
TATTGCAAATATTGCAAATTGCCAGTACTGNTACTGCAATCACAATCCAAAGGGATTGGAT
TGTGTTGTTGCAGGAGAACAGACAGCNAACTAGCAAATATGAATGCCNCAATACGAAGGGAT
TGACCAGTTAACCAACATTTAGCCCCATGGCTGTTGCCAGATTATGACATTGGCTCCCC
AGTCATCGGCTGTGGNTTATTCGGG

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FIGURE 301

ACCGCCTGACCGTGCTGGCTGGTCAATGCTTGCCTGGGACTAATGACATGCTTGTCAAGTT
TGTTGGCTATGCCACCACAGTCATCCCCAGGGTCTATACTACATACTATGTTCAACTGTATTAT
TTGCCATTTTGGCATTAGAATGCTTCGGGAAGGCTTAAAGATGAGCCCTGATGAGGGTCAAG
AGGAACCTGGAAGAACGTTCAAGCTGAATTAAAGAAGAAAGATGAAGAATTCAACGAACCAAAC
TTTAAATGGACCGGGAGATGTTGAAACGGGTACAAGCATAACAGTACCTCAGAAAAAGTGGT
TGCATTTATTCACCCATTGGTCAAGCTTACATTAACATTCTAGCAGAATGGGTG
ATCGCTCTCAACTAACTACAATTGTATTGGCAGCTAGAGAGGACCCATGGTAGCCGTGG
GTGGAACGTGGCGAACCCCTTGC

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FIGURE 302

TCGAACCCANGGGNCCGCCAACCGTGGGACCATATAGAGAAATAGCATGAATATTTTAT
TAGGAGATTTCAAAGACTGTATTCCAATGGTAAAGGAAAGTCCAAAACCTCTTAAGGAA
CACTGCAAGTTGAGCCTCTGCTGTTAATAGGTAGGTGACCTGCCTGAGTCAGTCAGTCTTTG
AATTCATAATTTCTAATCTTAAAATGAGGTTTGGTGATCCCTCAGTTCCCTTCAGCTCT
GGAATTGGTGGTAAGTTACCTGAATGTGTATCTTCTTGTAAAATTTAAAAACAAT
ATAGAAGGAAACAAATCCTTTACTCCTATTAGAAATAACCCCTAAACCTGGTAATAT
TTTGACGTGTTTTCAAACCTGTCTGTCATTTAAAGGAGCTCTGCGTATAGTT
ATGCCCTGCTTTGTGCATGTTAACAGCATTGGTATGTTATTTAAAGTGAATGCCTGAA
GAATGAATCAGTCAGACCTACTGTTAACATTGATGTATTCAGACTGACTTACAATTTT
GGTATTGATATTATGTATAATTATATCCTGCATTACTAGCATATTAAGGATTTTATA
TGTAATTTAAAGTGGAA

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FIGURE 303

ATTTTTATGTATTCATAGTATAAAAGACCTTCAGTAAATAGGTAATATTTGTTTATTCT
AGAAAACAGCTCCTTGAACNCAGTAAGCTGGCTTTCACNCATTGCCAGTGGTAAGTGTTCAC
TGCCCTTGCCATTTAATTATGAGGCTAAAGATGTTTGACACCGCACATGTGTGTTATGGC
TTCCTTGATATGCTCTCGACAGCTTTGGCTGGCTTTGCAGAGTCGTTGAGAAGGT
TATCTTGGCATTAAACAGTGATGTCAATACAAGGTTATGCAAACCTCCGTAATCAATGGAG
CATAATAGGAGAATTAAATAATTGCCTCAGGAAGAACCTTACAGTGGATCAAATACAGTAC
CACATCAGATGCTGTCTTGCAGGTGCCATGCCTACAATGGCAAGCATCAAGCTGTCTACACT
TCA

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FIGURE 304

ATGAAATCCTGCTTCTTCAGAACACTATATTCAAGTGGCTAAATGGCTCCCTGATTC
ATGGTTGTGGAATCTGGNTCCCTTTCCAACCTTGTTAATTGGAATTGATGCCCTTG
CCTTTCTTCTGGAATCAGAAGGCTTGCTGGCCTGAAAAAGGAAATCCGAGCCCAGATT
TAGAGACTTGGTCATGCTTCTTCTGCCTACTCATTCTGGGATAGTGTGGTAGCTT
CAGCACTCATGACAACGATGCCGCAAGCATGGAATCTTATATGATCTCTGGAGTTCTATC
TACCCATTATATTATTCCTGTATATCATTGATGGGATTTGTTACTTCTCTGTGTACACCAG
TTGGCCTTCTCGTATGTCACAGTGATGGTCAGTTGCTAGTGAAAGCC

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FIGURE 305

ATAGTATTAAGTCNATTGNGCAAGTGNAGCCTAGAAGATTGGAGTGTNTTNA
CTGGTGGCTTAGAATTCTCCAAGAAAAGTTAAGAAAGGTGTGAAGATTCCTTACAAGGN
CCGTGTACATGACACTGTTAATGATTGCATTGGCTTGCTGTGGGGCATCTCTGCGGATCA
AACCCACGCAGAGCGTCTTCATTCACGTGTCTGCCTTGTCAAGCACACCCCTCGTGTCCA
GGTCCTCATGGCAGTGCTCGGGTGACAAAGAAGGCAGATTGACTACAGCACCGTGCTCC
TCGGCATGCTGGTACGCAGGACGTGCAGCTCGGGCTTTCATGGCCGTCAAGCACCGTGCTCC
ACAGGCAGGCCAGTGCATCTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTGAT
TGGTCAGATTCTTTTCACTAGCGGCGGTTTCTTTATGTCTTGTATAAAGAAGTATCT
CATTGGACCCTATTATCGGAAGCTGCACATGGAAAGCAAGGGAAACAAAGAAATCCTGATCTT
GGGAATATCTGCCTTATCTTCTTAATGTTAAC

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FIGURE 306

AACCTATATAAAATAGTTTACAGTTATAGCTGTGACCACATCAAGTCAGATAATTGGGAT
GTTCACAGAGAGCTCTGGGTGATTATGACAGTGACCACCCACATCTCTTATTGTTNTGCTTC
ATTCTCTACTAGGGAGAGGAGGTCAATAATAATATGGTATTTTATGTTATTTAGATAAAT
CCATATCAACACAGCACAGGAGAACNAATTATACCCCTGGTAGATTGGGTATAAACGTC
ATGAAATGTTCTCAGAAAGTGAGAAATATTCTTGATTGTATCTTAAAATTAATGCAAAT
TGTTATGTTACTCCATAATTATTTGTGCATTACTGTAAGGTTCATGTGTATTCATATTAA
ATTTTTCTTTAAAAATTGGGTTCAATGAATTATCTAGGATGATTGCATTGTTGTGGCATH
AAGTGTGTTCTCCCTTCCATACCAAGCATATCCTGCTTTGGTACAGG

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FIGURE 307

TTACTTGTGAGTATCATCNTGCCCTTAATCCTGTACCCCTAAAATAAGNAATACATTTTGAC
ANAGGCTTAATGTTAACAAAAGAGTGTGGACATTTCATTTAAATTTAGGCAAAAGTCA
CTATCAAATGGTGCTTACACANCCATAGTTTCCTGGANGGTTTGT
GTTGTTGTTGAAAAGACTTGNTTACAGNTANATGNAACCTTTATAGAAAAAAAATTGT
TGAAAGGTCCAGTTCTCAGTACCATGTGAGTTAATGATACTACAACTAAGTTCTTTAAAAA
GTGATTAATGTATTAAATTACCTTTCACATATGCAAAATCTGTTCTACTACAATGTT
ATTTTACTAATGCCTTATTGTTGCACTCTTTGAAATATCCTGCAGTGAATATGAATCA
ATTTGGGCTTAAACTGAAAGCCAGTTGGCTGAAAGGTTGAAATACGTACCCC

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FIGURE 308

TTCTTCTTCCCCATNTCATTCAAGGCTCCCTCGCANAAGTGAGGTATTTAGATAAT
CAAAACCCCACACAAGACCTAACAGCAAATACAGATGAAATGTAATTATTATTCAATTAAA
AAGGGAATAATATTTGTAGGCCATTGTNACCAGTATTCTCTCGTTAACTAGTTTGCTGCA
TTTAAATTAAAGTGCTGCTCTTCAGCTTGTACAGCTATAAGTGCACATTGGAATTATAT
GTATATATATATAGAGAGAGAGAGAGAGAGAAAATGACTGCTGGTTCAGTGTGTGCCCTC
AGATCATACCACTACGAGTGCCTCAGCCTGGAAAAGCTAACCATGAAATTGATAACAAATACGC
TTTGGAAATGAAATCAGGTAAGAATCACATATGTTGAAATTGTTAAAATAACATTGTCAT
ATTTCTTGTGTTATCTGGTTGCTGGTTATCTCTTG

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FIGURE 309

GTGGCCCGTCTGGCTAGTCCTGNTAAGCGCGCCATTGAGCCCAAGTTCCAGCTCGGGT
TTCCGGGCTCAGAATTTCAGGAGTGGTTCTGGGCAGTGGCTGTGGAACAGGAATGGCGC
AGCTANAGGTTACTGTTCTGCCGCCNTTGAGCTGTACCTTTAGTGTCTGCCTCCTCT
TCTCCGCCTTCAGCCGGCGCTGCGAGAGCCCTACATGGACGAGATCTCCACCTGCCTCAGG
CGCAGCGCTACTGTGAGGGCCATTCTCCCTTCCAGTGGATCCCAGTATTACATTAC
CTGGCTTGTACCTGGTGTCAAGTGGAGTGGTCAAACCTGCCATTGGATCTTGGATGGTCTG
AACATGTTGTCTGCTCCATTGGATGCTCAGATTGTTAATCTCTTCAGTGTGGCAACT
TCTATTTACTATATTGCTTTCCACAA

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FIGURE 310

CGCNTGGCCCAGTGNACGCCTGTGCGGTTCCGGGGAGTCGGCTCCAAGTCTGGGACTCCAAC
CTGTCTGTGCACACAGAAAACCCGGACCTCACTCCCTGCTTCCAGAACTCCCTGCTGGCCTGG
GTGCCCTGCATCTACCTGTGGGTGCCCTGCCCTGCTACTTGCTCTACCTGCAGGACCATTGT
CGTGGTACATCATCCTNTCCCACCTGTCCAAGCTCAANAATGGCCTGGGTGTCCTGCTGTGG
TGCCTCTCCTGGCGGACCTTTTACTCCTCCATGGCCTGGTCCATGGCCGGGCCCTGCC
CCTGTTTCTTGTCACCCCCTGGTGGTGGGGTCACCATGCTGCTGGCCACCCCTGCTGATA
CAGTATGAGCGGCTGCAGGGCGTACAGTCTCGGGGTCCCTCATTATCTTCTGGTTCTGTGT
GTGGTCTGCCATCGTCCCATTCCGCTCCAAGATCCTTTAGCCAAGGCAGAGGGTGAGATC
TCAGACCCCTCCGCCTCAC

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FIGURE 311

CCATCAGGAAGGTGAAAGAGGTCTTGGGACAGGGGCCATGAGACATGTGGTCATCCTCTTCA
CCCACAAAGAGGACTTAGGGGCCAGGCCTGGATGACTATGTAGCAAACACGGACAACGTCA
GCCTGAAAGACCTGGTGCAGGGAGTGTGAGAGAAGGTACTGTGCCTTCAACAACTGGGCTCTG
TGGAGGAGCAGAGGCAGCAGCAGGCTCCTGGCTGTGATTGAGAGGCTGGGAGGGAGC
GAGAGGGCTCCTTCCACAGCAATGACCTCTTGGATGCCAGCTGCTCCAAAGAACTGGAG
CTGGGGCCTGCCAGGAAGACTACAGGCAGTACCAGGCCAAAGTGGATGGCAGGTGGAGAAC
ACAAGCAAGAGCTGAGGGAGAACGAGAGTAACGGCATACAAGGCGCTCCTCAGAGTCAAAC
ACTTGATGCTTTGCATTATGAGATTTTGTCTATTGTTGTGCAGCATACTTTTT

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FIGURE 312

TCTTTGTTCTCACAAAGTTATCTTACATTGGAATGACCCTGAATTAGGAAGTTAAAGTGAAC
TGGTTGGATTTGGATACTGCTNTAAAAGTTAGAAAATTAGGTCATTGACATTNTGCTCCGT
GTTTGCCATGTTGGTCTACATACTTTGCAAAGATCAAGGAAGACCTTGAGGCATCTC
TTTATCTCTTATTCTATTACTATCACCCCCAATTCAAGTCATCATCATTACCCCTGGACTCTG
GGATAGCTTCCCCTGTTCCCACTCATCTACTCTTGCTCACTGCCTCCCCCAAACCCCCTA
AAATTCAATTCTCCAGATAGTGACTAGAGTGAAATCGACTATATCTTCTCTTCTGCTCTGGA
TATAATTATATCTTCTGCTCTGGATATAATTATATCCTTCATTCTCCATTCTGTGCC
CCTGTGTGCCAACTGCTATTGTCTGCATTAGATGGACTTCCTTATCTCTGGCTTCTATTGAA
TTTGGTGAACGGGGAGGGTCAAGTAGGAGATCAGTGTGGAGAAGAAAGAAGTTGAGTA
TTTATCACCTAGGAAGGGGACTTCCAGGACACTGTTGGCAGGGATGCTGGCCTCTACTGG
AGGCCTAGTTCCGACTGTGTTGCC

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FIGURE 313

TTTTTTTTTTTTGGATTAATGAGGAATCATTCTGTGGCTCTAGTCATAATTATG
CTTAATAACATTGATAGTAGCCCTTGCGCTATAACTCTACCTAAAGACTCACATCATTGGC
AGAGAGAGAGTCGTTGAAGTCCCAGGAATTCAAGGACTGGGCAGGTTAAGACCTCAGACAAGGT
AGTAGAGGTAGACTTGTGGACAAGGCTCGGGTCCCANCCGGACGNGTGGG

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FIGURE 314

ATTTGGGTTTTTTTCCAAAAATTGCTGAAATATTGTTTGCCATTTAAAAAGTCTCAG
GTTATTACCACTCTGCCATTAAATATTTGTATGCCTGCATTTAAAAATTCTGTGCATGTAC
TTTATGGAGTACATTCTATTTGTTTCAGATAACCCGGACGCGTGGG

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FIGURE 315

CGGACGCGTGGGAAACCTTGCCTCAAGGGTTTTGTTTGTTTGTGTTTGT
GTTTGGGTTGTTGTTGGTTGGTTGAAACGGAGTCGCTCTGTCGCCAGGCTGG
AGTGCAGTGGCGCAATCTGGCTCACTGCAAGCTCGCCTCCGGGTTACGTCATTCTCTG
CCTCAGCCTCCCGAGTAGCTGGACTACAGGCGTCCACTACCACGCCTGGATAATTTTGTA
TTTCAGTANAGACGGGTTTACCGTGTAGCCAGGATGGCTTGATCTCCTGACCTCATGA
TCCCGCCTGCCCTGGCCTCCCAAAGTGTGGATTACAGNGCGTGAGCCACCGNGCCGGCAC
CTTCAAGGTTTGTAAATTTGATAATGCTACAATCCGTTGCTGCAAAGAACTCGAAAATGC
ACACGCCAACATAGGAGTCTTTATGCCCAAAACATTAAGTNNTTCATCCAACCCCTCAA
TCGGGCATAATAAAAGCATTCAAGGCACACTACNACAAGGGAGCTTATATGAAGGCCTGTG
AGGCTCTCAGGACCAACAAGGAAACCACCATGCTGGACTATTGGAAGTCGGTCACTACATGCA
ACGTTATTGATTATGTCAGTACAGCCTGGAGAGCATTGGTCAGGCTACTACCAATACTGTT
GGGAAAATGTTGCCAGACTGCGTGGAGAATTTGAAGGGTTGAAGGTGTTACAGAAAATA
TAAAGAACACTGTCAGAGACATAATGCATATGGCACAGCAGGTAAGTGGAGAGGGCTTGATG
ACGTGAAGGAAGGAGATGTGGAGTACATTGGCAGAGAAGGCAGTGGAACCAACCAACGAAG
ACCTGGATGAGATGGAAAACAAGGCATTGGAGTTGATGGCCATGAAAGTCGGCCAAGACTT
CCAGAATTGTCCCTCTCACAGCGCCC

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FIGURE 316

AAATTCTACTCCTGGATTTGGAAGGCCAAAACATTTTCCCCATGGGATAACATCCCCATG
TTNTGGCACAAATCCTCTTGAAAATAATATGGAACCTAGATATATTAGNCATTACGTCN
TCTGGNTGNATGACATCATTCAAGAGCTTTCAAAGCATTTGTTCAGATCTCAGTACTGCC
AGTTTCATACAGTCTCGGGGTTTAAAACTTGAAATCAAGGACACGACGTCTCCAGTCTAC
CTCCGAGAGATTAGTTGAAACNCAGAATATAGGCCATTCGTGAAGGGTTCTTGCG
GGACAGAGGATCAGATGTTGAGAGTTGGACAAACTCATGAAAACCAAAAATACCTGAAGC
TCACCAAGATGCATTTAAAACGGTTTGCAGAAGGTTCTGAAAGCTCAAGCACTCACAC
AAAAAACCAATGATCCCTAAGCGAACCCGTCTGATTCTCTCGTTCTGCTGCTATTGGCA
TTTATGGACTTCTAAAAAACCCATTTTATCTGTCCGCTCCGGACAACAACAGGGCTTGATT
CTGCAGTAGATCCTGTCCAGATGAAAATGTCACCTTGAACATGTTAAAGGGTGGAGGAAG
CTAAACAAGAATTACAGGAAGTTGTTGAATTCTTGAAAAATCC

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FIGURE 317

CGCTTGGGCAGGTTGGGTTGAAACTNTTCACCCCTGCGGTNTGTACTGCNTCCAANTGAG
CAGCCAGGAGAAGGCTAGAGCCTGTGCCTTCAGCTAGATAGCTGGAGGAACGGTCCTCCCT
CCTTAGGCTGTGCTGGCCTGAGCTGGAGCCTGAGAGCTGGGCAGTTGTCTCTAAAGTGGCT
TCTGGGATTCTGGTAAGAGCGTTACATCCTTACTATTCAAAGTGCCATCCACAGACCTGCTGA
TGGGCAGCATGAGCATCACCTGGGAGCTTGCTGCGCTGTAGAACATCTTGAGGGTCTCCATCCA
GATCAGCTGAATCAGAGTTGCATTGTTAACAAAGATTCTGCTTCTCAGAACAGATGCACTATTAT
AGATACTCTAACGCCAAGGTAGCTGCTGGTACAAGTACCTCCTTCAGCTACAAACATCATC
TTCTGGTTGGCTGGAGTTGTCTTCCCTGGAGTCGGGCTGTGGGCATGGAGCGAAAAGGGTGTG
CTGTCCGACCTCACCAAAGTGACCCGGATGCATGGAATCGACCCTGTGGTGCC

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FIGURE 318

NTGCAGTCAACGCAGCTCCGGGTTAGCCTGGGAANATGCGCGAATCGGNAACCCCAGAGC
CCGGTGGTTAGACCGGGGTCCGCCGCTTCCCCACAGCCCNTTCCTAATCGTCAGACGGAG
CCTGGTCGACTTCGCCGGAGACTGCCAGATCTCGTTCCCTTCCCTGTGTATCTTCTTAATT
ATAAAATAATGGGGATGAAGATAAAAGAATTACATATGAAGATTAGAACCATCCACAGGAAT
GAATTACACGCCCTCCATGCATCAAGAACGACAGGGAGAGACAGTTATGAAGCTCAAAGGTAT
AGATGCAAATGAACCAACAGAACAGGAAGTATTCTTGAAAGCAGTGAAAAAGCTACAAGA
AACACCAACTGAAGCAAATCACGTACAAAGACTGAGACAAATGCTGGCTGCCCTCACATGG
TTTACTGGACAGGGTCATAACAAATGTTACCATCATTGTTCTGTGGCTGTAGTTGGTC
AATTACTGGCAGTGAATGTCTTCCTGGAGGAAACCTATTGGAATTATAATCCTATTCTATTG
TGC

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FIGURE 319

TCAGCGGGTAAGAAAATTCTACTTCCNGGGATTTGTAAAAGGCAAAACCTTTNTTCCCC
ATTGGCATACTTCCAANGTTNTGCCAATCCTTCTTGAAAATAAATATGGAACCTAG
ATATATTTAGTCATTACGTTCTGGCTTGTATGGACATCATTCAAGAGCTTTCAAAGCAT
TTGTTCAGATCTTCAGTACTTG GCCAGTTCATACAGTCTCGGGTTTAAAACTTGAAAT
CAAGGACACGACGTCTCCAGTCTACCTCCGAGAGATTAGCTGAAACACAGAATATAGGCCAT
CATTCGTGAAGGGTTCTTG CGGGACAGAGGATCAGATGTTGAGAGTTGGACAAACTCA
TGAAAACCAAAATATACTGAAGCTCACCAAGATGCATTAAAACGGTTTGCGGAAGGTT
TTTCTGAAAGCTCAAGCACTCACACAAAAACCAATGATTCCCTAACGGCGAACCGTCTGATT
CTCTCGTTCTGCTGCTATTGGCATTATGGACTTCTAAAAAACCCATTTTATCTGTCCGC
TTCCGGACAACAACAGGGCTTGATTCTGCAGTAGATCCTGTCCAGATGAAAATGTCACCTT
GAACATGTTAAAGGGTGGAGGAAGCTAACAGAATTACAGGAAGTTGTTGAATTCTGAAA
AATCC

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FIGURE 320

GCCNAGCGGACGGGCCGTTAACGGGCTGCTCGCCGATTCTTACCTGAGAAATGCTAC
GACCAACTTTCGTTAGTGGACTTGCTCACGTCCCCTGCCTCAAGATTCTCCTCAGCAA
GGCCTGGGCTGGCATTGTGGCTGGCTACTTCTAGTAAAGCTGCCAGGTGTTAAAATC
CTGGGAGCCAAGAGTGCTGAAGGGTTGAGTCTCCAGTCTGTAATGCTGGAGCTAGTGGCATTG
ACTGGGACCATGGTCTACAGCATCACTAACAACTTCCCATTCACTCTGGGTGAAGCCTTA
TTCCTGATGCTCCAGACGATCACCATCTGCTTCCCTGGTCATGCACTACAGAGGACAGACTGTG
AAAGGTGTCGCTTCCTCGCTACGGCCTGGTCCTGCTGGTGCTCTCACCTCTGACGCC

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FIGURE 321

GTTGGCCTGATTCTCCCCACCAGAGGACAGACGTTGAAAGATAACCACGTCCAGTTTCAGCAG
ACGCAACTATCATGGACATTCAAGGTCCCACACGAGCCCCAGATGCAGTCTACACAGAACTCC
AGCCCACCTCTCCAACCCCAACCTGGCCTGCTGATGAAACACCACAACCCAGACCCAGACCC
AGCAACTGGAAGGAACGGATGGGCCTCTAGTGACAGATCCAGAGACACACAAGAGCACCAAAG
CAGCTCATCCCACTGATGACACCACGACGCTCTGAGAGACCATCCCCAAGCACAGACGTCC
AGACAGACCCCCAGACCCCTCAAGCCATCTGGTTTCATGAGGATGACCCCTTCTTCTATGATG
AACACACCCCTCCGGAAACGGGGCTGTTGGTCGCAGCTGTGCTGTTCATCACAGGCATCATCA
TCCTCACCAAGTGCAGCGTGGCGGACGCGTGGGG

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FIGURE 322

CAGTGCCTTAGATTGTGTTGCCTCCTCCAATGTAGAGTTGACATNTGGACCCAGAGCCC
AGCAGGGCTTNTGTCAGACATGTAGGGGGTAGAAATGGGCCCTCCAGGTCCCCCTGCAGTG
CACTGGGCAGAGACCTCCGGAAAGCCGGCAGCGGGAGCGCTCCTGGCAGCTCCCCCAGCA
CAGTGTTCCTAACACCAGTCCATCCGGAAAACAGTCTGTACAGCAAATGCTGTGAGATCTTA
GGCTTTCACTTTTTGTTTGTGTTGAAAGAAAGAAAAAAATACAATTAACAAG
CCTCTTTGTAATGGGTTCCCTTCTATGTATAAAATCGTGGTGGTCCCTTGTGTTTACATG
TTCATGCTGTGAATTTGAGATGTTACTGAGATATGTTCTGAACATAATGTGCATTTTTC
TGTACAGATGAAATGGGAGAATTAAATAAGAGTTGCAGCCCACGCGTCCGGACGCGTGGG

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FIGURE 323

GAAGTGTCACTGGACAATTNGCAAGTTAGGTCCAGTCCAGTTGGAGGATTCTCCATTGTT
CCAAGGTGTGGNAATTNCAATGGCCTGATCTCCATTTGTGNCAATCTATTNCAATGTCAT
AATTGCCTATAAGTCTTACTACATGTTGCTTCAAAAGTGAAC TACCATGGAAAAATTG
TTCTCGTGGTCAGATAAAA ACTGTAGCAGATCACCAATAGTAAC TCACTGTAATGTGAGTAC
AGTGAATAAAGGAATACAAGAGATCATCCAAATGAATAAAAGCTGGTAGACATCAACAATT
TACCTGCATCAACGGCAGTGAAATTATCAGCCAGGGCAGCTCCAGTGAACAATATTGGAA
TAAAGTGGCGCTCCAACGGTCAAGTGGATGAATGAGACTGGAGTAATTGTTGGTATTAGC
ACTTTGTCTTCTGGCTTGGCTCATAGTTGGAGCAGCACTATTTAAAGGAATCAAATCGTC
TGGCAAGGTGGTATATTACAGCTTTCCCCTATGTGGCCTACTCATCCTGTTAGTACG
AGGTGCAACTCTGGAGGGTGCTTCAAAAGGCATTCATACTATATTGGAGCCCCGGACGCGTGGG

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FIGURE 324

CGGGGGGCNTACACCACTGCCTGNGTCTTCACCACCGCCGCCGTGCAGTTGGAATTGATCACA
CCTTTTCAGTTGTACTTCAATCCTGAATTAATCTTAAACACTTCAAATATGGAGATTAATC
ACCAACTTCTTATTTTGCCCCAGTTGGATTCAATTAACTTTAACATGATTCTATAT
CGTTACTGTCGAATGCTAGAAGAAGGCTTTCCGAGGTGGACAGCAGACTTGTATTTATG
TTCCTTTTGTTGGATTCTTAATGACCCCTTTGGTCTGTTGTGAGCTTAGTTCTGGC
CAGGCCTTACAATAATGCTCGTATGTGGAGCCGAAGGAACCCCTATGTCCGCATGAAC
TTCTTCGGCCTCTCAACTTCCAGGCCCTTCTGCCCTGGGTGCTCATGGGATTTCTTG
TTGTTGGGAACTCAATCATTGGACCTTGGTATTGCAGTTGGACCGGACCGTGGG

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FIGURE 325

TGCAAATTNTGAGATTCAAGAGACTAAAGTAATTTATTTACATAGCTAATCAGGCCAGAGC
TGTGAATCTAACAGATTATCTTGCTCTTAATCACAAAAACACAGTTATTAGTTGTTGCATTT
GATGCAAATGACTTGGAACCCACACATTACACACATTAAATGAATGAAATGACTAGTTGA
TTCATTACACGTTGTGGAAATTTGCAGCTAGGTTAAATTAAGAACACCAGATTTATTTA
AATACAATTAAAATCATTGTATTCCAAATGGAAGTTCTCTATAAGAACACCAGGCTGGA
TGTGGTGGCTCACACTTGTAAATCCTAGCACTTGTGGCCGAGGAAGCGGACCGCTGGG

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FIGURE 326

GTCAGGATTTTGAAGTTTTTTTATAGTGAGATAATGGAGTTGGCTTAGCCGCTGCAG
GAGCCCTTCTTTCTGTGGATTCATCATCTATGACACACACTCACTGATGCATAAAACTGTCAC
CTGAAGAGTACGTATTAGCTGCCATCAGCCTCTACTGGATATCATCAATCTATT CCTGCCGG
ACGC GTGGG

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FIGURE 327

CAAGTTAGGTGATCCAGNTTGTGGCTTTGCAACCCTGTGGTCATTGTGCCCTTGATAT
TAATCTCGTGGTGGTCCTCGCCATGGCAGACAAACATTCTTGTGTACATAACAATCTGCTC
TGTAAATCGGCGCGTTTCAGTCCTGTGAAGGGCCTGGCATTGCTATCAAGGAGCTGTT
TGCAGGGAAAGCCTGTGCTGCGGCATCCCCCTGGCTTGGATTCTGCTGCTGAGCCTCATCGTCTG
TGTGAGCACACAGATTAATTACCTAAATAGGGCCCTGGATATATTCAACACTCCATTGTGAC
TCCAATATATTATGTATTCTTACAACATCAGTTAACCTGTTAGCTATTCTTTAAGGA
GTGGCAAGAGATGCCTGTTGACGATGTCATTGGTACTTGAGTGGCTTACAAATCATTGT
GGGGATATTCTTGTGCATGCCTTAAAGACGTCAGTTAGTCTAGC

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FIGURE 328

AAAGTGGCCTTTAGGGTAAAGAGTTAACAGAGTTAATGNGTNTATGGCAGGTTGGAA
AGGTAAGAAATGGGTCCCTTTCTCCTAAATGTTTGCACTAAAACATAAAATTCTTAT
CCTATTAAAAAAATTAAATTCAAGTTGCTAATCCAGAAATTGTTCCAAATGAAAACCTGTTT
AAGTCCACCCCTAGTTCTTACAGGTCTCTCTCAGGGACCAACAGGGGCTTAGA
GAGCCTTAGTTAGATTAAGGGAGACCCTACCTCTAAAACCAGTTTCATTTATGCAAACAA
GGACAATTAAGGGAACCCCTGACCCCACAGGCCTCAAGTCTCCAAAGGCCAGAATCGAAAGA
AAATTAAAATTGAATGCTGAATATTCTGGCTCTACTCTGGCCTTTTCTGGTTCCCTCC
AAAATGCACAAATCATACCCTTGTCTGCTCCAATTCAAGTCTCCAAACCTGGTGCCTGTGCTCC
TGGCCCCCTAGCATCATGCTATCCCAGGAGTATCAGGACCAGACACATCCACGG

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FIGURE 329

GGCNACGGCGGCCNAAGACGGACATGAAGCAATATCAAGGTTCCGGCGGGTCCCCATGNATG
TGGAACGNAGTCGCTTCCCCTACTGCGTGGTGTGNACGCCATCCGGTGCTCACGTGGTT
TTCCCCATCATCGGCCACATGGGCATCTGCACATCCACAGGAGTCATTGGGACTTCGCGGC
CCCTACTTTGTCTCAGAGGACAACATGGCCTTGGAAAGCCTGCCAAGTACTGAAGTTGGACC
CTGCTCAGGTCTATGCTAGCGGGCCAACGCATGGGACACGGCTGTGCACGACGCCTCTGAGG
AGTACAAGCACCGCATGCACAATCTCTGCTGTGACAACGTGCCACTCGCACGTGGCATTGGCCC
TGAATCTGATGCGCTACAACAACAGCACCAACTGGAATATGGTGACGCTCTGCTTCTGCC
TGCTCTACGGGAAGTACGTCAAGCGTTGGGCCTTCGTGAAGACCTGGCTGCCCTCATCCTTC
TCCTGGGCATCATCCTCAC

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FIGURE 330

TTTGATTAATGTTGGTTGTGTCTCCTCCTGGCAACTGGATTTGCCTGTTAGAGGTTG
ATTGCTTGATTGCCCATNTGAGCTCTGCCGATTATATACGCAATTCAAGAGCCCTATNTA
AAGGATCCTGCTGCTTATCCTAAAATTCAAGATGCTGGCATATATGTTCTATTCTGTTCTTAC
TTTGTGACTGCACGTATGGCTAGTGGTTCTGGATGTTCTGGATGCCTGACATCACATTG
ATACATGCTGGAGGTCTGGCTCAGGCTCAGTTCTCACATTGGTGCATCTTCATGCTAGA
ACTGCTTATGTCTACAGAGTCCCTGAAGAAGCAAAATCCTTTTTAGC

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FIGURE 331

GAAAATATCTGGAGGTACTGCACATAAGGATTCCAATTCTATTTCAGAACTTTCATTTGTA
ATTATGTACGCATCTAACGTCTATTACGTGTACTGAGTTAGGGTGTACAACCTTCCT
GAGGCTGTATCTCAAAAACTTGGAAGCTGAAGAATTGTCAAATCTATGTTCCCTTTGTT
TGTAATCACCTGATGATGGTGTAGTAGCTGTGGCCAACGAAATGTCAAGGGAAGTCTGCTGG
GGAAGGTAGACGTAGGATAGGAGTATGGGAAAAAATTATTCACTCAAAAGCATGATGCACAGA
GGAGCTATGATCTTCTTCTCCTCACTGGATGTTGTATGTCTGTATGTACTTCCTGG
ACTGTGGCACCATCTAACCATGAAAGGAGCTCACATGAAATCATGTTAACATAGCAGAG

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FIGURE 332

AGGTTGGTCTTTCCGGTTTGCCAAATTCAAGTTCCAGNNNTCCATNATCCAAGTTG
AAGCCCCNTGGCGGATCCTTAAAAATCCCTGACCTGACCAGGGTCGCCAAGGGTCGCACAAGG
CCTGGGCCAGGTTCCCACAGGGAGGTGAAAAACTCCCATTCCGTTAAAAGCAGTTCCCTT
GGGACCCATTCCCTTCCCTTGGCATGGCGTGNCCCTCCAAAGGTTCCGGTAGTTAACATG
CAAATGTTCTACCAATAGCCCCNAGAACTCCACCACCCCTCTCTGTCTGTGGCTCAAGTCG
AGCAACCTGAAAGGATATATTTTCAAATAAGTAATTCCCTGTAGGCAATAAAAGATAACACT
ATCTTCTGAGTGAATATAAGAGTTCACAGCAGCTGTCTCCCCAGTTGCATTTCCTCTGC
ACCTGATGGGAAGGACAGATAAAAGATAATGGGATTTTCTTATTTTTATTTCACCTCCCT
CTCTCCCTGGAAGGTGGAAATGTAACAAATTGGATTGTGAGTGTGTCTGTCCTTGTGCTGG
TGCCTGGAGCAGGGCATCCGGCTGCCGGCAGAGCTGCTGCGAGAGAGGTAGAGCTACC

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FIGURE 333

CCAAGTTGAAGCCCATGGCGGTCTTAAATCCTGCCCTGACCAGGGTCGCCAGGGTCGGGCAAG
CAAGTGCAGAAGAATAAAGAACGATGGACGCAAAAAGAAGAAAGGAAGNNCCAGAAGAGACGA
AGAGATGAAACGACAGTCAGATGANATGAGGAGGAAAGAAAGGTTCANAAAGCCGNCGGAAA
TGAAAGNCGTCTGGTTGAANGAANTGCCAANAGATAAATCCAGCAGGANAGGCCNAGAAA
GATCGAGGTCTGTTATCTGCTGTTACCTTGGACACCAGAGCAGCTATAGGTATCTGCCAGAG
CTATGAAATCATTAGCCGGATCCTCTTCCTCGTCTTCCTCCTCGCCGGCTGAGGTCCAAGC
CGCTCCCTCAGCCCCCTGCCTTGGCTGTGGCTTCCGGACATGGCCCACCCCTCTGAGAC
TTCCCTCTGAAGGGTGTTCTGAAAATTCAAACGAGATGCCCTAACCCAGAATTCCCTGG
GACTCCTTACCCCTGAGCCTCCAAGCTACCTCATACGGTTCCCTGGAAACCTCCACTTGA
CTTCACTGAGCCCCCTAACCCCTGACCTCCGAGAAACCCCG

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FIGURE 334

TTCAGACTCACTGAATCAGAACCNNTGGGATAGGCCAGCACGCTGTGCTTACCAAGCTCTAGG
TGATGCCAATTCTACTCAAGTGTGAGGCTGACTGGCTTATTGAAGGGAGAGAAAGGAACAG
GCACATGGCGACATATCAGCATTACACAAGGCGTGCTGGTAACCATAGGAACACCTTATT
ACGGTTAAATAGGAAACAGGCATCAATGCAGAGGGCCCCCAGGAGAATCAGGAAGGT CGCGAC
TGTCACTGTCTGAGGGCACTGTTGTGAAACGATGCCGAAGGTGACAACCACAGCAAAGTTTC
AAGGAAGTTCACTGAAACGTGGAAAACCCACTCAATGTCCTGCTCTCATTTATATTGAGTGG
CTTAAGTATTATTTCTGGTTTTAGAGGAAGGGAG

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FIGURE 335

GAAGCTTCCGTTGCCAAGCGACATGTTCAAGGTAATTCANAGGTCCGTGGGCCAGCCAGCTT
GAGCTTGCTCACNTTCAAAGTCTATGCAGCACCAAAAAGGACTCACCTCCCAAAATTCCGT
GAAGGTTGATGAGCTTCACTCTACTCAGTTCTGAGGGTCAATCGAAGTATGTGGAGGAGGC
AAGGAGCCAGCTTGAAGAAAGCATCTCACAGCTCCGACACTATTGCGAGCCATACACAACCTG
GTGTCAGGAAACGTACTCCAAACTAAGCCAAGATGCAAAGTTGGTTCAATGGGGTTAGA
CAGCTATGACTATCTCCAAAATGCACCTCCTGGATTTTCCGAGACTTGGTGTATTGGTTT
TGCTGGCCTTATTGGACTCCTTGGCTAGAGGTTCAAAAATAAGAAGCTAGTGTATCCGCC
TGGTTTCATGGGATTAGCTGCCTCCCTCTATTATCCACAAACAAGCCATCGTGTGCCCCAGGT
CAGTGGGGAGAGATTATGACTGGGG

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FIGURE 336

GGCGGCCGAGGC GGACGGCCGCTTAAACGGCTGCTCGTGCCGATTCTTTACCTGAGAAATGC
TACGACCAACTTTCGTT CAGTGGGACTTGCTTCACGTCCCCTGCCTCAAGATTCTCCTCAGC
AAAGGCCTGGGGCTGGGCATTGTGGCTGGCTCACTCTAGTAAAGCTCCCCAGGTGTTAAA
ATCCTGGGAGCCAAGAGTGCTGAAGGGTTGAGTCTCCAGTCTGTAATGCTGGAGCTAGTGGCA
TTGACTGGGACCATGGTCTACAGCATCACTAACAACTTCCCATT CAGCTCTGGGGTGAAGCC
TTATTCCCTGATGCTCCAGACGATCACCATCTGCTTCCTGGTCATGCACTACAGAGGACAGACT
GTGAAAGGTGTCGCTTCCTCGCTTGCTACGGCCTGGTCCTGCTGGT GCTTCTCACCTCTG
ACGCC

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FIGURE 337

CGGAACGCGTGGCGNACGCGTGGCAAGATGTCCCTGTGGACTCCAAACTCTACTCCAGAT
GGGNAGGTGCCCTAACACCAAGATTTAAAAGCTCCAATTTCAGAGCAAGAGTCGAAAACTC
ACAGATAAAAGTTATAGTTATTCAGGGTCTGAAAAGACGCAGAACATGAAGGGACTCAGAAG
TCTGGCAGCAACAACCTTGGCTTTCTGGTGTGTTCTGGAAACTCCAGCTGC
TCCGCAGAGACTGTTGGAGAGAAGGAACGGACTCCTCAAGCTATGCTCTACCTGAAAGGGC
ACAGGGTCGCCGCTTCATCTCCGACCAGAGCCGGAGAAAGGACCTCTCCGACC
GGAAAGACGAAGCCAAATCCCCAACTACTAACTATTCCGGAGGCAGCAACC
GTCCCTTCAGAAATCACCAAGATGAAGAAAAAACTTTGATCAAAC

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FIGURE 338

CCNTGCACAAGCAGCACTTCTTGCCATAGCAACATGTGCATCAATAATTCTTAGTCTGT
AATGGTGTCCAAAATTGTGCATACCCTGGGATGAAAATCATTGTAAAGAAAAGAAAAAGCA
GGAGTATTGAAACAAATCACTAAGACTCATGGAACAATTATTGGCATTACTTCAGGGATTGTC
TTGGTCCTCTCATTATTCTATTAGTACAAGTGAAACAGCCTCGAAAAAAGGTATGGCT
TGCAAAACCGCTTTAATAAAACCGGGTTCCAAGAAGTGTTGATCCTCCTCATTATGAAC
TTTCACTAAGGGACAAAGAGATTCTGCAGACCTGGCAGACTTGTGCGAAGAATTGGACAAC
TACCAGAAGATGCAGCGCTCCTCCACCGCCTCCGCTGCATCCACGACCACACTGTGGGTCG
CAGGCCTCCAG

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FIGURE 339

AAATAAAGAACCATGGTATCATGTTGNTCAGTGCTTCAGACAGAAAGATTGTTGAAGCATCAA
GGAGAGCTTTGTTATGTGGCAATGAACCTACGAAGAGGAAATGGCCAAGAAACCCGATTGTCT
AGAGAAAGTTACCAACTACCTGATGGGAAGGTCATCCAGCTCCATGACCAGCTTTCTTG
TCCAGAGGCCCTCTCTCTCCGTGTATGAAACCTTGAGGCCCTGGCATTGATAAGATATG
CTTCAGCAGCATAATGAAATGTGATACAGGCCTGAGGAATTCTTCTTTCCAATATTATCCT
TGCCGGGGATCAACCTCTTCCCTGGTTAGACAAGCT

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FIGURE 340

TGGCGGTCTAAAATCCTGNCCGTGACCAGGGTCCGGCGGTTCAAGTTGGAGGAAAAGTGTAGCC
TTGCAGGTGGCAANTGGTCCAGGTACCGGTATTGGCNGGCCGTTTGCTCCTCCTCCGT
GGGTGCGGCCGGAAATNTTGGCCGGNCGGCCCTGGGACGGCCCAGGTCCGGCCGCAAGGTCCG
GGCCAATACATAGTCATCAGTAGAAACTCTTGAAGTTGTTCAAGAAAAATTGAAAGTAGCA
AAATAGAAAATAAAGAATTAACAGCAGATACAGAGGCAGCATGAAGTGTGCTTAGGAAACA
GAACACAGCAGTGAAAAAACAGACAAAATCCGCTCAGATACAACTGCAGCTGATAATGTTTC
CGGCTTCAATGTCTTAGAGTTGGATCTCTTGTCAATAATGTGCATTTTACATGCCAAC
AGTAAACTCTTACCAAGAACTGAGTCCTCAGAAATATTTAGTACATTGCAACCAGGAAAAGC
CTCTTAGCTTATTTGTCAAGCTGATTCCCCAAGAAATACA

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FIGURE 341

CCGAATCAAGTCGAGTCATCCGTGTGGCATTNGTCCCCNTGGCACAGTTGGCTTCTTCC
AGAAGCCC GTTTGTTGTTACGTCTAAATT CGCGT CGTTCTTATTCTCTCCCTGGCAA
GGTCTGAAGACGGTAGGAGAATAACCTGTGTCAGCGTGTATGATGCCGTCCCGTACCAACC
TGGCTACTGGAATCCCCAGTAGTAAAGTGAAATATTCAAGGCTCTCCAGCACAGACGATGGCT
ACATTGACCTTCAGTTAAGAAAACCCCTCTAAGATCCCTTATAAGGCCATCGCACTTGCCA
CTGTGCTGTTTGATTGGCGCCTTCTCATTATTAGGCTCCCTGCTGTCAGGC

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FIGURE 342

AGTTCCGGCAAGGGTGCATCCGGCNTGTGTGGCGCAAGGCAAGGAAACCGGTACCCGGGTC
CTGGCCCCAGCGCTGACGTTCTCTCCCTTCTCTCTCTCGCGGGTTGC GGCGTCG CAG
ACGCTAGTGTGAGCCCCATGGCAGATA CGACCCCGAACGGCCCCAAGGGCGGGCGCTGTG
CAATT CATGATGACCAATA ACTGGACACGGCAATGTGGCTTCTCGCTTGTTCACAGTTAC
TGCTCTGCTCTGTTCTGCCTCTTGGTTGCATGAAGCAGCAAGCCTTACCAACGT
GCTTGCTGCCAAATGCTCTTACCAAGCTGAGGGCTTGTTAGAGGACAGCTGCCACTACCTGTTATTCA
TTAACAGAGCATT CCTGTCCCAGGCTTGTTAGAGGACAGCTGCCACTACCTGTTATTCA
CTCATCTTGTAATCCCTATCCAGTTACAATGAGTATCTCCCAGTCTGTTATTCTTTG
CTTCATGCTGC

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FIGURE 343

CCTGACCCAGGGTCCGGNGCAATTTCCATTATGCCCTGTGGTNCGGGACATACTAGATN
TCAGNCCATTCCCTCCAGGTTTGGCCTTGTAAAGGCCCTGGGCTGGGATTNCAAGTGGCT
TGATCAACCCCCNTTGGNCCAGTACTACCCTTAGGGNCCGTGACCNTGACTNTNTGCAGGCAT
TTTCATACCTATCGGGTTGGCGTCTTCATTGCTACAAATACAGCCGGGGCTGANTACATT
GTGAAGGTTCCCTGTGGTCTCTGCTAGTAGCTCTGGTGGCCTTTCATATGACCGGCACT
ATGTTAGGACCTGAAGTGCCTGCAAGTATCCCTGCAGCTGTTATGTGATAGCAATTTTATG
CCTTTGGCAGGCTACGCTTCAGGTTATGGTTAGCTACTCTCCATCTCCACCCAAGTGC
AAGAGGACTGTATGTCTGGAACAGGTAGTCAGAATGTGCAGCTCTGTACAGCCATTCTAAAA
CTGGC

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FIGURE 344

CCTAAATAGGCCCTGGATATATTCAACACTTCCATTGTGACTCCAATATATTATGTATTCTT
TACAACATCAGTTAACTTGTTAGCTATTCTTTAAGGAGTGGCAAGATATGCCTGTTGA
CGATGTCATTGGTACTTGAGIGGCTTCTTACAATCATTGTGGGATATTCTTGTGCATGC
CTTAAAGACGTCAGCTTAGTCTAGCAAGTCTGCCTGTCTTCGAAAAGACGAGAAAGC
AATGAATGGCAATCTCTTAATATGTATGAAGTTCTTAATAATAATGAAGAAAGCTAACCTG
TGGAATCGAACACACACTGG

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FIGURE 345

TTAAGTGCAAACCATGCAGTGCCCGAGGATGATACCATTAGCAATGACTCCAATGATTCACC
GAAGTAGAAAATGGTCAGATAAAATAGCAAGTTATTCGTGATCGTGAAGTAGAAGAAGTCTC
ACAAACAGCCATTGGAAAAAAAAGAAGTGTGATGAGTATATTCCAGGTACAACCTCCTTAGGC
ATGTCTGTTTAACCTAACGCAACGCCATTATGGGCAGTGGGATTTGGGACTCGCCTTGCC
CTGGCAAACACTGGAATCCTACTTTCTGGTACTTTGACTTCAGTGACATTGCTGTCTATA
TATTCAATAAACCTCCTATTGATCTGTTCAAAAGAACAGGCTGCATGGTGTATGAAAAGCTGGG

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FIGURE 346

GCAGCATTAGAGTTACTGGCTGTCATTTCATGGTGATGATTTATTTGTAGCTTCATAA
CCTGTTGGGAAGAAGTTACTACTTGGTACAGGCTATCAGGATAACTCCTATATGAATGAAA
CTATCTTATATTTCTTTCATCCCCTCCAGTTACTGTGAGATCTAAAAAAATATTCT
TATCCAAGCTCATTGTCATTGCTACGTTACCTGGTTACCATTGTACTACTTCAGGTAATCA
TTGTTTACTAAAGTCAGATTCCAGCATATATTGAGATGAATATTCCCTGGTTACTTTG
TCAATAGTTCTCATTGCTACAGTGTATTGGTTAATTGTACACAAGCT

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FIGURE 347

ACAATGTTGGTAAAATAATTGGGGGGACTTTGGGCCNTTCAGGNTTAATAGTATTAAGTC
TATGGGCAANTGGAGCCTAGGANAATTGGGGGTTTTAATCTTTCTGGTGGCTTAG
ATTTTCTCCAGAAAGTTAACGAAAGGTGTGAAGATTCCTTACAAGGCCGTGTTACATGCC
ACTGTTAACGATTGCATTGGCTTGCTGTGGGGCATTTCTTGCNATCAAACCCACGCAGAG
GGTNNTCATTTCCAAGGTGTCTGTCCTTGTCAAGCACACCCCTCGTGTCCAGGTTCTCATG
GGCAGTGCTCGGGTGACAAAGAAGGCAGATTGACTACAGCACCGTGCTCCTCGGCATGCTG
GTGACGCAGGACGTGCAGCTCGGCTTCATGCCGTATGCCGACTCTCATACAGGCGGC
GCCAGTGCACTTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTGATTGGTCAGATT
CTTTTTCACTAGCGCGGTTTCTTTATGTCTGTTATAAAGAAGTATCTCATTGGACCC
TATTATCGGAAGCTGCACATGAAAGCAAGGGAAACAAAGAAATCCTGATCTGGGAATATCT
GCCCTTATCTCTTAATGTTAACGGTCACGGAGCTGCTGGACGTCTCCATGGAGCTGGCTGT
TTCCTGGCTGGAGCGCTCGTCTCCTCTCAGGGCCCCGTGGTACCGAGGAGATGCCAC

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FIGURE 348

AAAAAAAAAAAAAAAAGAACCTTCTGCCTTATCATTCTCTTTATTACCGAAATG
CGGAGACAGAAAGTCAACAGAGAAAGAATTGTTCCCCAAGGCCACACAGATTGCTCCAACA
CTTGACTTTCTGCTAGGAACCTCAATCCAAGAGATGGGCTTCTTGTCTGACTATAA
AAGGGTGTACCTGTCACCATCTTCTATCACACAGGACCCCTATGGGCTTGGTTGGTTTG
TTCTTCATCATTATTATTGGAAAGTTATATTCTTACTGTCCTTGAGGTGTGAGGCTTC
ACCTCATCTGTCTCCATATCCCTGAG

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FIGURE 349

TGGATCCCATGCCAGGGNGCGTCCAGGTGCAAACCAAGTAGAACNCAGGCCTGAACCTGGG
GCCAGACACCTGTTCCCCGGCCATGGTCAAGACCNTCCAGTACNTGCCTACTGTGGGCC
CAGAANTGGCCAAGTCTTGGCAGCCGTGCCAGGTTGTGCAAGTTGGGTGTTCTTC
TGCACCATCCTCCTTGCTCTGGTGTCTGCTTCCTCATGGCTCCTACTATTCCAT
ATGCCGACAGTCAGCCACNTCAGCCCTGGCATTCTACTACAGGACCGACTGTGATTCCCTCA
CCACCTCACTCTGCTCCTCCCTGTTGCCAATGTCTCGCTGACTAAGGGTGGACGTGATCGGG
TGCTGATGTATGGACAGCCGTACGTGTTACCTTAGAGCTTGAGCTGCCAGAGTCCCCTGTGA
ATCAAGATTGGGCATGTTCTGGTCACCATTCTGCTACACCAGAGGTGGCCGAATCATCT
CCACTTCTCGCGTTCGGTGATGCTGCATTACCGCTCAGACCTGCTCCAGATGCTGGACACAC
TGGTCTTCTCTAGCCTCCTGCTATTGGCTTGCAAGAGCAG

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FIGURE 350

AAATTGAAACCCATAAGTTACCAAGTCTATCAGGNGCAGTGGCTTGATTAAAGCCCATT
TTTAAAACCTAAAAACTAACNCNTCCCAGATTATAATAGAAAAGAAATGGCNTCAGTTGA
TCTCGTTCAGAATGCCCCAGATTGTTCTGCTTGCCCCAGCTGTTAGTCAGAGTTATATTN
CAGAGAATTATTTCTGAGATAATCTTAAACTAGAATGTTCAAAACTAATTGATAATTGAAGT
ATCAAGATACTAGTAGAACACCTCAGAGATTTCTTCAGGAACCTCCACAAACTTGAATCCTT
GTATCTTATTGGTATTCTACTACTAGTAGCAAAATACAGGTTTTGTTTGTGTTGTT
TGTTTGGCTTCATAGAGTATCTCAAATTGAAACTTTCTGCACAAAGAATAAAATTAAGGAT
TTTATAAAACTCAAATTGGCACCTACTGAATTAAAATACATAAAATCATTAAATATAATTCA
CATATGGGAAGTAACATTGCACTAATATGGAAATCACTGCCAGAGACAGTCTATTTCTTTA
ATTGTTACTACTTAGTCACAAA

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FIGURE 351

TCAGAAGGGAATGAAATCCNCAGCGGACCTGGCATCAAAAACTTGGCAAAGCAATTGAATT
GNAAGCAATAAAACNGACTTTATCAAGTCCTAAATGTACAAGAGAAGAGAAAATCACTTG
ACAATGAAGTTGAAAAGACAGCAAATCTTGTCAATTAGCAACTGGAATCAGCAAATTAGGCCA
AGAAGAAAATTAAATGGTTAGTACCAAGAACATGAAGCACTTTCCAGCTGTAGAAAGCTCCA
AGCAATCTATGACTGAGAAGGAGAACCGGAAGCTCCTCAATAAACTGACAAAATCAACTGAAA
AGTGGAAAAGGAAGATGAAAATTACTACCAAAAAAACATGGCGGGTTATTCTACCAGACTGA
AATGGGAAAACACACTAGAGAACTGCTACCAGAGCATTCTGGAGCTGGAGAAGGAAAGAATTC
AACTTTATGCAATAACTAAACCAGTACAGCCAACATATTCTCTTTGGCAAACCCCTGA
CCACATGCCACAC

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FIGURE 352

TTTAAAGAAATGGTAAATACTGAGCCTTNTGCAACCTTTGGAAGCACCAGCCNCAGA
AGATTCTGTGACTTGTGTGCTTTAGGTGCACCCTCAGACNTCTGGCTCAGTACACCTCGGGN
TGATTGAGACTGTTGCCCTCAGTCTCTCATTGGTTGACATTATTCAATTAAATGAATGAATA
CATTGTCGCAGAAAGTGGATTCTCTCATTGTTGAGAGAAAATTCTCAGCTTGAGTCAAGAA
GTTTCCATATTACCAAGAACCTCTAGCTTGATGAGCATAATCACTGCTAAAATAATGTGTC
TTCTGAGCAGCTGGGTACCGAGTGCCTGTGGCCTGTAGCATTAGTTACTGCCTGAGGGATGGTG
ACTGTTACCGCAGAATGGTGGGCTTCGTTGACTTGTCTCTCCTCTCCCTCTTACCCACTT
CCCGGAGAAACAGGACAGCAGGCACAGCCAGTAACAAGCTGGTACGCCCTCCCTGGCCCTGG
TGACGCTCATCATGTATTCCATTGCCACTGGAGGCTTGGTTTGATGGCAGTGTT

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FIGURE 353

GTGGGCCAATGCTGTCCAAACTACAGGGGTTAATGTAAAGCTTGTGNTAACATATGAAAAGT
ATTAGAAAGAGCTTGGCATGTAGTAACCACTCAATAAAAGTTAGCTACTATTATGAAGTGTT
TTCCAATGGTTATTTAGAACGAAAATAGTATCAGTNAGAACGTCAGGCTTGTCCCC
AAACATGTTTCACAAGTGCTTCCATGGTCTCCTCTCCTTCTTCTCCTCTCCTCTAAA
AACATATTTGCTGTCTGCTTGGTCATCTTCACTGGGCCAGAGAAAGAACCTGAGGGT
TGGACAAGGGGAGCAGCTGAGTTGGTGAGAAAAGGAGCCCAGCAGGTTGAATGCCCTGAACCA
CTGTGATGAGCTTGTGAGCTGGTGCCAATCAAAGTGAAGCAGTGGGCTTGCCAGGTGAGAT
GTTAATTCAGCAGTCACACGTGTCCCTGTCTGGACTCTCCCTAGGACTCTGACCCTACCCCT
GCAGTGGTTGAAATGGATTTATTAGGCTTCATTACATTCTCATATCATTTCACCTG
GTATCTAAGCTACACGAGAGCCAGTGTAGTGCTTGTCTTG

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FIGURE 354

CCGGTAACCCATTGGGCCTGGCNTAANAAAGTTTTAAGCCATTAGACGTTTAAAGGAA
TTGGNAGATGNCAATTGGGAAATATTAAGTAAAATATAAGCTTCCTTATTCA
TGTAACCCAGNCAATCTCAGTATAACATGATCAGTTGTCTGACAGGTAAATCTATTGAGGC
CTTATCACACGTTACTTTAAGAACTAGAAAGGAAAGTCACTGATCTTAAGTATTATAATA
CTTCATGTGGTCTAATACTTTACGTTTGATTGACATTAGTCCGGATTCCCGGT
TCTGGCAGTAGGTTCTAGTGAGAACTCAGTGGATTTATGACCTAACGCTGGGCCCACTCT
TAACAGAATCAGCTACTGCAAAGACATTCCAAGCTTGTCAATTCAAATGGACTTCTCTGCAGA
TAGCAGTTATCTCCAGGTACAGTACCAATACTGTATAACCCAGGTGGCAAGTTCTCTGTTT
ACATTCGTGTTAGTGAATGCATTAAAGTTCCCTGAGCTCCAGAGCTCCAGCTTCTCAACTCC
TCCCTTGTACCTCTGACCTACAGCTCCTTTCC

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FIGURE 355

TCATGGCGGTATACTTGGCAAGTGGTTATCTTTAACGGGTTCATTTCCCAGTTGTTAAA
TTTACAGTTGGTTAANTAAAAGTTTCCAGTACGANCAGGGCGTAATCANAGATCCNTAAG
TGTTTAGTNCAGGGCATGTGCTTTAAAGTGGGNATGGCTATTACAGATTGCCCTACACTG
TTNTGGTGGGAGCCNTCAGTGACCAAGGAGCAGAGGTACTTGAACACCACCTGAAGCCATN
TGGATGCTCCGTTCAATTCAAATCTGGGTGTTCAACCAAAGTAACGGCCACAGACTGCAA
TGTAAGATAACAATCTCAGGACCTAGTGTGTGCACATGTTGGCTCTTATATAAGATGGCATH
CTTAGTACTTGTCTATGTAGAAAAGAATTGTGGGCTCACAAAGTCCCTACAGAGTCTCACAC
TCTCATGGCCAATAAGTATAACAGGGATAACCGGAATTAGACAAACACAGATGAGACATTATT
TCTGTATATGAATTATTTATTATTATTATTATTGGGACAGGGTCTCGCTCTGCGCC
CATCCTGGAGTGCGGTGGCCTGGCTCATTGCAAGCTCCGCCTCCGGGTTACACCATTCTGC
CTC

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FIGURE 356

TTAATTAGATAATTTAAAGTAGCGTTTTCTACAATGTNTGAAGAAGTGACCTACGCGACA
NTCACATTCAGGATTCTGNNTGNAGCAAGGAATACCCGAGATGGAAATAACNTAAGAAAAAGA
GGGCATCCAGCTCCATCTCCCATTGGCGTCATGCTGCTCTGGGTCTGGTAACTCTTGCGCTG
ATGTTGCTGATTGGGCTGGTACGTTGGGATGATGTTTGCAAGATATCTAATGACATTAAC
TCAGATTCAAGAGAAATTGAGTCAACTTCAGAAAACCATCCAACAGCAGCAGGATAACTTATCC
CAGCAACTGGGCAACTCCAACAACATTGTCCATGGAGGGAGGAATTCTCAAGTCACAGATCTCC
AGTCTACTGAAGAGGCAGGAACAAATGCCATCAAACGTGCCAAGAGCTAACATTCAACT
TCAGACCACAGATGTAATCCATGTCTAACAGATGTGGCAATGGTACCAAAATAGTTGCTACTAT
TTTACAACAAATGAGGAGAAAACCTGGGCTAACAGTAGAAAGGACTGCATAGACAAGAACTCCAC

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FIGURE 357

CAAAAANAGTCCCCGTCCNGTTGTTGTAAGTGAAGGGACGGCAGTCAGTTGACCCCTGCAGTG
GCAGGGCGAGCGCAGGGAGTACGCCATGTCCTGAGAAGGGGCGATTCTCAGGCTNTGGCAGTTA
CAGCTTCTCCTCACCTGCCGAGCAACCAGGCCACGGGCTCCGTGCATGCCACCTAGACTG
TTACCCNTTCCTGTTCACGGAGGTTCTCCGCAGTGTGTGAGAAAGAGGCCCTCTCAGAT
GAATGGATAAAAGAAAATGCAGGACATATGGGGGAGGAGCCAAGATGCCGAATAGGAACAGC
TCCGGTCTACAGCTCCAGTGTGAGCGACACAGAAAGACAGGCAAGAAGAATAATGTCTCTGG
TGGAACTTTGCTCTGGTGGAACTGCTTTCTAGAACTGGTGTGCAGCATCCCTGGAAGTGT
CAGAGAGGCCCTGGGAGTATCCAGGTGGCCGGGGTCAGACAGCAGTCCTGCCCTGCACTTTCA
CTACCAGCGCTGCCCTCATTAACCTCAATGTCATTGGATGGTCACTCCTCTCCAATGC

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FIGURE 358

GGTCCCTAAAGATTGAAGCTTTAAGACTCAGCTTGACACATTACTAATTATACTTAA
TTGTCCTGGTGATTCACCCCCGTGGGTTGTTCCCTGAACTCCACACTCATTACGTTC
AGAGCCTTTNTACACTACTTGAATTATTTTATTTAGGTATATAAAACTGGTGGCAATA
GCATAAATTCTAAGTGTAAACTTGATGAAGTAATATTGTACACCTATGTAAGCACTGCCAG
ACTGATATACATTACAGCCTAACGGAGGCTTGTGCTGCTTGTCTTGTGCTATTAAATTCCATTG
CCCAGAAATAGCCCCTCTCTAATTCCATAACCAGAGATAAGCTTACATGTTTCCGCTTC
ATGTAATGGAATCGTACGCTGAACCCTTTGTGCTGGTTCTTGCTAACATTATT
CATGCAACAATAAGGATGGCTCTCAGACATAATATTCTATTATTTATGTAGTGTGTTAT
GGGAATTGCACTGAGTTAGAGAAACTGAAGTNTGAAGGAATAGTTCCACAAGACTGCCCTCA
TTTCAGAC

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FIGURE 359

AGTGCCGTCCGGTGTGTAAGTGAAGGACGGCAGTCAGTTGCCCTGCAGTGTGCAGGCNAGC
GCAGGAGTACCGCCATGTCNTAANAAGGGCGATTNTCAGGNNTNTGGCAGTACAGTTCTCCTC
ACCCCTGCGAGCAAACCAGGCCACGGGGCTCCGTGCATGCCACNTAGAGTGTACCCCTTTCC
TTGTTCACGGAGGTTCTCCGCAGTGTGAGAAAGAGGCCCTCTCAGATGAATGGATAAAG
AAAATGCAGGACATATGGGGGGAGGAGCCAAGATGGCGAACAGCTCCGGTCTACAG
CTCCCAGTGTGAGCGACACAGAAGACAGGCAAGAAGAATAATGTCTCTGGTGGAACTTTGC
TCTGGTGGAACTGCTTTCTAGAACTGGTGTGCAGCATCCCTGGAAGTGTCAAGAGGCCCTG
GGAGTATCCAGGTGGCCCGGGGTCAAGACAGCAGTCCTGCCCTGCACTTCACTACCAGCGCTG
CCCTCATTAACCTCAATGTCATTGGATGGTCACTCCTCTCCAATGC

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FIGURE 360

CAAAATGTTAAGAACGTCCACTCCTAATCTGTGGGTGGTNTGCATTGCCGGGCCNTGGTTN
TCTTNTGGCATTTNTGCTTNTGCNTCATATTCTTGTAGGCCAGGTGGGCTTGGTGCAGGAC
ACCCCCAGTCNTGGATTACGGGCCCCCTTCCAGCCCCCTTGACCTTGAGTTGCTCTG
ACTATGAGTCCTCGGCTGCTGTGATCAGCACAAGGACCGCCGATCGCTGCCGGTACTGGG
ACATCATGGAATATTTGATCTGAAGAGACATGAGCTGTGTGGAGATTACATTAAAGACATCC
TTGCCAGGAGTGCTGCCCTACGCAGCCCACCTNTACGACGCCGAAAACACCCAGACGCCCTC
TCCGGAATCTCCGGGCCTCTGCTCTGATTACTGCTCTGCCCTCCATTCTAACTGTCACTCAG
CCATTCCCTGCTGACCAATGACCGCGGCCCTCCAGGAGTCTCATGGAAGGGACGGTACCCG

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FIGURE 361

CCACACGCGTCCGGCTTGAAGACTGACAAGATGTCCCTGTGGACTCCCAAACACTCTACTCCAGAT
GGGGAGGTGCCCTAACACCAAGATTTAAAAGCTCCAATTTCAGAGCAAGAGTCGAAAACTC
ACAGATAAAAGTTATAGTTATTCAGGGTTCTGAAAAGACGCAGAACATGAAGGGACTCAGAAG
TCTGGCAGCAACAAACCTTGGCTTTCTGGTGTGTTCTGGAAACTCCAGCTGC
TCCGCAGAGACTGTTGGAGAGAAGGAACGGACTCCTCAAGCTATGCTCTACCTGAAAGGGC
ACAGGGTCGCCGCTTCATCTCCGACCAGAGCCGGAGAAAGGACCTCTCCGACC
GGAAAGACGAAGCCCCAAATCCCCAACTACTAACTATTCCGGAGGCAGCAACC
GTCCCTTCAGAAATCACC

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FIGURE 362

AATCACCCGGGTCGCTGTTCCCTNAGGTGGTCAAGGTGGACAGGGCGGTGGTNATGGCNCAGT
TTGACANTGAATAACCAGCGCCTAGAGGCCTCCTATAGTGATTCACCCCCAGGGAGGAGGACC
TGTTGGTGCACGTGCCGAGGGGAGCAAGTCACCTTGGCACCATATTGAAAACCTTGACCTCT
TCTTCTCTCGAGTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGCTCATGGGGAGA
TCTTGAGCTCATGCAGTCCTCTTGTTGCCTTCACTACCTCCTGGTCAGCTGCGTGG
ACTATGACATCCTATTGCCAACAAAGATGGTAACCACAGTNTTCACCCCTACTGAACCCGTCA
AGGTCACTCTGCCAGACGCCCTTGCCTGCTCAAGTCTGTAGTGCCAGGATTCAAGGAAAATGG

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FIGURE 363

GTCCGAACCTGAGCAAACACAGCAGCCCAGTGTTCCAAGGCCAAATGCTGAGAACGTCCA
CTCCTAATCTGTGTGGTCTGCATTGCCGGGCCCCCTGGCTCTCTGGCATTCTCTGCC
TCTGCCTCATATTCTGTTAGGCCAGGTGGGCTTGCTGCAGGGACACCCCCAGTGCCTGGATT
ACGGGCCCCCTTCCAGCCCCCTGCACCTTGAGTTGCTCTGACTATGAGTCCTCGGCT
GCTGTGATCAGCACAGGACCAGCGCATCGCTGCCGGTACTGGACATCATGGAATATTTG
ATCTGAAGAGACATGAGCTGTGGAGATTACATTAAGACATCCTTGCCAGGAGTGCTCGC
CCTACGCAGCCCACCTCTACGACGCCGAAAACACCCAGACGCCCTCCGGAATCTCCGGCC
TCTGCTCTGATTACTGCTCTGCCTTCCATTCTAACTGTCACTCAGCCATTCCCTGCTGACCA
ATGACCG

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FIGURE 364

CCACACGCGTCCGTGAACACACAAAGAGCTTATTTGTTAGGCAAATACACATTAATAAGAATG
CCTAGAACAGGGACTGATTCTTCACACCCGGACCCACTGGTTGCTGTTGGGCCTGCTTGCTC
TGCAGTTGGTATTATTATGTACCTCCTGGAATGTGCCCCCCAGACTGATGGAAATGCATCT
CTTCCTGGTGTGTTGGGAAAATTATGGTAAAGAGTATTATCAAGCCCTCCTACAGGAACAA
GAAGAACATTATCAGACCAGGGCAACCAGTCTGAAACGCCAATTGCCAACTAAAACAAGAA
TTACAAGAAATGAGTGAGAAGATGCGGTCACTGCAAGAAAGAAGGAATGTAGGGCTAATGGC
ATAGGCTATCAGAGCAACAAAGAGCAAGC

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FIGURE 365

TGGTTGGGCCTCCAAGATTAGAATGTTACTAGGGCCAAAANCAGTGGGATTGGTAAAGAGGG
CAATGATACCCCCATGAGAGCNTCACATNCAGAACCGAGNCAGAACTTCAGGTTTGATGA
TANCAATGATGATTCCCTGACAATGGCAGAATGTCAATTCAACATGAACGGAAAA
TCTTAGAGCTAAAGATGAAAAATGATCCCTGGTACCCCTCAGGCAAAGTTGTATCCAGGAAA
ATCATTGTTGAGAAGATTGCTCACGTCTGGCATCGTATTCAAGGTGTTCCACTGCATGACAG
TGAAGCCCTGAAGAAGCTTGAGGACACCTGGTACACTCGGTTGCTTGAAGTATCAGCCCAT
AGAGAATCACAGATTGGAATCTGCCTATCAGAACCATCTAATTCTGAAAGTTAGTGTCAA
CTTCCTCAATTGCTTGCCTCACTCTTCTATATTGCCCTTGCTTGAAAGATATGAAGCTTT
GCGCCAGAGCTTGGCCACTCTCTTAATTACCTCCCAGATCCTCAACCG

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FIGURE 366

ATTTGATTAAATTATGAATGAGTTTACAAATTCCCTTCAGAGTTACTAAGATCACACAAA
TAACAGCTTNTTATTCACTGAAAAAGATATTTATTCTGATGTTTATTGCACTCGTGG
ATATGTTACCATTAATCAGAACATCATGGCAACCCCTAAGAATAGACTAAGTTGTGTTGGC
TGAGGGATTNTATTGGTTGCTTTTTGCTTGTATATTATTGCTACA

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FIGURE 367

GGCTACAACTGCTAACATGGAAAAGACATTCCGGGCAGATCGGCTTTGAAAGCTTAAAGG
GAGCTTGATGCTGGCAATGGGATCAGAGTGTGACNTGACATCGGGATGTTCATTGCTAGTC
TGACCACATCTGGCTCCTCTGTANAAAACATTGTTCAGAACCTGTGACAGACGAAGCAGCACAGA
GTAACCCGGAGTTGAAAATGAAGAATTGGCTGAAGGAGAAAAATTGATTCAAGAGAGGCNC
TGATCTATGAAGAGGATTCAATGGAGGAGATGGTGTGAAGGCAGTTGGAAGAAAGCACGA
AGTTAAAAATGTTCCCGCAGGCTTGCCTCTGTGGCCTNTAAGCTCAAGGAGTTCATTGGCAACA
TGATCACCAC TGCTGGAAAGTCGTTACCATCTTACTGGCCTCCTCGGGCATGATGTTGC
CGTCTTG

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FIGURE 368

TTAAGCCGGAAAATCCCTTGAACCCAGAAGCGGAAGGTNCAGTCACCCAAAATGGNGCCCAT
TGCATTCCAGCCTCGGTNCGGAGCAAGACTTGTAAAAAAATTAAATTAGCCATTAC
CCCTAGNTAATTTTAAATTTGTGAANANAGGGCCTCACTGTCTTGCCCAGGCTGGTCTC
GAACCTCCAGGCCAGGTGATCCTTCTGCCTGCCTCCAAAGGGCGGGATTACAGGTGTGAG
CCACTGTGCCCAACTCATTACTTTTAAAAAATTACTTCCATTCTAGTTATATATGACA
GGTACTTAAGTAGTAAATATTATGTTAACATAAAATAAAATGATCAGGATTCCCC
CGACATGCTTCCTTCTCTTTCTCCTTCTCTCTCATTATCCCTCCTGCC
TTTTGGAAGTCCTATTGGAGGAAAAATAACTGCCCTATTGTTCTCACTAATTGTTA
TCAGTCTCGGGTATCAAGGCAAGCAGATTCAAATTGCTGTAATATACAGTGCAATTAGATT
AGAGTCTACTAAGAATTAAATTGGAGAATGTTAAAATACTTTCTAAAGTTAATTTTTAG
TATTCA

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FIGURE 369

TAGAAGGTCCGTATGGACCCCAGATCCATTCTAGNAAGGCCGTATGACACCCNGGATCC
ATTCCTAGNAGGGCCGTATGACACCCCGGATCCTTCCCTCAGAGGGCTNGTCATGAC
TCAGACACATCTCCTCCCAGAGGATCCGTATGACTCCTCAGACACTCACCCCCAAGGAGGG
CCCGTCATGATTCTCAGATCCTTCTCCCCAAGGAGGCCTCAGCATAATTCTCAGGTGCAT
CTCCTAGGAGAGTCCGTATGATTCAACCAGATCCCTCTCCTCCTAGGCAGGCCGTATGGTT
CCTCAGATATCTCTCCCCCAGAAGGGTCCATAACAACTCCCTGACACATCTAGGAGGACTC
TTGGCTTTCAGACACACAGCAACTCAGAAGGGCCGTATGACTCCCTGATTGGCTCCTA
ATGTCACTTATTCCCTG

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FIGURE 370

CGGANGCGTGGCCGAACGCNTGGTCCAACCATATGCCAGGTCACNCGGATAAAAGTTAGGA
AACGTAACCAGCTCATTTCAGCAGACTAAAGATCTGAAACTGGAACTAATATCA
AGGATTTATGTGCTGCTCTTGATTCTGATGAAGAATCCAGTGCTCATATGCCTAGCTCTGT
CAAAAGCTACAGAATATTTAGTTATTATTGGAGCTCTGAATTTCGCCTATATATTAGAAA
ATCAGTTATATTAAACACCCACTGTGGCAACTACACTTGAGGACTTGTAAATTCCAGGAG
GTGCACTTGGCCAGCTCTGGGAGGTGTCAATTGTTCCACATTAGAAATGTCTTGTAAAGCCC
TTATGAGATTATAATGGTTACATCTGTGATATCACTTAACTGCTTGTGTTATTATTTG
TACGCTGTAATCCAGTGCAATTGCTGGGATCAATGAAGATTATGATGGAACAGGGAAGTTGG
GAAACCTCACGGCTCCTGCAATGAAAAATGTAG

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FIGURE 371

AATAAAAATGGCTTAAAGAACATTCCGAACCAAAAGGAACCGGTCCNGCCTAACAAAG
TGGGACATTGCCNTCAAAGGGNCCTCATGGAACATCNTGTTGCGGGGGCANGCACAAT
GGTCAAGGGCTTCCCTAACCGTTGCANAAGNAGTTAANCAGCATGTGTCCCAATGNCCCCG
CAGGTAAACGTGCTGCCTGAAANAGCCAGTCCGTGGACCAGGGCTCCATCCTGGCCTCATT
CAGGGTTCCAACCATTGTGGTCCACCGCTTGAGTACGAGGAACACGGGCCTTCCTCCTC
TACAGAAGGTGTTNTGAACGGCGACAACATTGGCGTCGTGAGATTCTGTGAGGCCTGCCT
GGAAGCCGGCAGCAATTGCTTAAAGAGAAAAAGAAGGCTAGGGACTCAGATTCTG
GATTCTGAGATCCAGACCAGCTCCTCCCAGACCTNTCCAGAAGAACGCATGGAACCCCTCGT
ATCCAGCATTTGCTGATCCTCCTGGCCTAGGAGCCTCCCTGACCTCGGGCTAGAGCTG
TATTGTCAAAAGGGTCTGTCCATGACTGTGGAAGCAGATCCAGCCAATATGTTAACTGGACC
ACAGAGGAAGTGGAGACTTGTGACAAAGGGCACTTGCCAGGAAACCATACTAATAATTAA

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FIGURE 372

GTGCGCATAAAGAGGAGGCCTGCCTTCAGCTTGGAAATCCGAAGATGCCAAAGCAA
CTCAACTGTTGCTTCCAGGGCCTGCTGATTGGAAATGTGATTATTGGTTGTTGCGG
CATTGCCCTGACTGCCGAGTGCATCTTCTTGATCTGACCAACACAGCCTCTACCCACTGCT
TGAAGCCACCGACAACGATGACATCTATGGGGCTGCCTGGATGGCATATTGTGGGCATCTG
CCTCTTCTGCCTGTTAGGCATTGTAGGCATCATGAAGTCCAGCAGGAAAATTCTTCT
GGCGTATTCATTCTGATGTTATAGTATATGCCTTGAAGTGGCATCTGTATCACAGCAGC
AACACAAACGAGACTTTTCAC

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FIGURE 373

TTAAGGATGTTGCCATGNACCATGTTTTCAAATTGCTTTCATGGGNCCGTTTGGAGC
GTCTTGACCGCTANGATGGTTTCGTCGTCTGGGAACCTGATCAGACTTGAAGATTNTAAA
TTTGGAAAGATCAGGGTGCACTTGAGTGATGAAATATTGTAGCCGCCAATTGGGAAA
CATACCTGCATGGCCTTGCACAAATACTTGGGGCTCACCTGGCCATTAAATTGGAACAAAGTG
AAGCAGTCACTCAGAGGACTGAGGGTGGCATTNTGTCCACCCACAACCCCCGTACAAGGCA
TGCTCATATACTCATAACAGATTGTGGAAATGATGGAATTGGATAGAATATGGCCCAGCG
CAGCTATATTGGAACCCAGCTGAAGTTTCCTCAAACCTTNTGTGCAACTCTTGTGTCAG
CTTATTNTATTGCCTGCAATTGGAAAGACCTATTATGCAAGGAATGACACTGTGCGCTTGCT
TTGGATGTCCCTGGCTATTCTTACTGTGGTGCCAAAATCCAGCTCCAGTTGGCAGAATCAGTG

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FIGURE 374

AAATTTTAAAAAACTCCTTAATAGGCCCTTTTTAACCTGAAAGTTGACTACCTA
CCTTCAGGAAATATATATTTGGGTTAGCTAGGTTGACTTCTTAGAAATGGAAAAG
ATGGCACCCCTCGGTACCAAAGTGCTGGGACTCTGCACTATGTTGTGTATGTGTGCCTC
TGTCTTGCTCTCTTATCTCCCAGCAGTGAGACATTGGACGTGTTGCTCATGAAGATGCAGTA
TATGGCTTGTCTGTGAGCCCAGTGAATGACAACATTTGCCAGTTC

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FIGURE 375

TTTTTTGGGAGGAGGAATGTNCATTCAAGGGAGTAGCTTTGGGAAAAATTNTNTAGGGCTA
CANACAGTCATGGGTGACTTCTTCTGCTGTGAAAACCCCAGAGTNTCTTAGGGATTTTC
CCTAAGGTGACCACCCAGGCACACCTCAGTNNTTGACCCAGAGCCTGAAAACGTTTTCANT
GGGTTCCACCAGTCCCAGCAAAATCCTCTTGATTTATTTGCTAAGTTATTGGGGTTTGC
TTACATCTCATGATTGATATAATACCAAAGTTCTATAGCCTNTCTGCAGTATTGGATTG
CTTGAAACCGGGAAAACGTGTTCCATTAGGCTTGTAAATGTCAGAGTGACACTATTATGAATC
TTTCTCTCCCTTCCTCGGCCTGTTCTCTCTTCTCCTCAAACCTGCTCTGCAGCTAA
GGAAGGTGAGTCTACTTCCCTGAGGCTTGGGGTCAGAGTATATGTTGTTGGAGAAAGAGG
GCAATCAGGACTNTCTGGGACCCAGATGAGTTCTCACTAGCCCTNTGAA

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FIGURE 376

AAATGTTACCTATCCTCGGANAAGGGTTGAATCCNCTGATGTGTGGATCCATTTGGT
GGTGNCATGATTCTCTCGTCCTATTTATTAACCTCATCTACCTGCAAGAGCACAAAAAA
CCATGCTAACCTTAACCTTGGATGTGCAATTACATTCCCTCCTGTTGCAGGGACATTTTCC
ANANAGNTCCAATCCTGGTTAACCGAAGCCAAAGAGAGTGTCTTCAGCATATGACTAGAA
CATTCCATGACTTGGAAAGGAAATGCAGTTAACGGGACTCTGGAATATGGATCAATGGTTG
ATTATACTGGAATTCTCACATAACCCCTCACATTCCCTGAGATCAATGATAGTATCCGAGCTC
ACTGTGAGGAGAATGCACCTCTTGTGGTTCTGGTATCTCCAGTGCACTTCTGATCA
GGAAAAACTGGTATCTCCTGCCAGAAGTTCTCCAAGAAATCCTCCTCATTCCG

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FIGURE 377

TTTGACTGGGTGTAAGAATATGCTGTTCCAGCAGACCAAGGAATGGCATTGGAAATCTGCNTN
TGGGGTAGGCACATCTTCATGGCTATTGGAAAGTGAGACTTGAAACTACAGAGGCCATCGA
TGATGAAGGCTGGTTACACTCTGGGATTGGGCCAGCTGGACGGTNTGGGTTTCCTCTATGT
CACCGGCCACATCAAAGAAATCCTTATCACTGCTGGTGGTGAAAATGTGCCCCCCATTCCCTGT
TGAGACCTTGGTTAAGAAGAAGATCCCCATCATTAGTAACGCCATGTTAGTAGGAGATAAACT
GAAGTTCTGAGCATGTTGCTGACGCTGAAGTGTGAGATGAATCAGATGAGCGGAGAACCTCT
GGACAAGCTGAACCTCGAGGCCATCAACTCTGTCGGGTNTGGCAGCCAGGCATCCACCGT
GACTGAGATTGTGAAGCAGCAAGACCCCTGGNTACAAGGCCATCCAGCAAGGCATCAATGC
TGTGAACCAGGAAGCCATGAACAATGCACAGAGGATTGAAAAGTGGTCATCTGGAGAAGGA
CTTTCCATCTATGGTGGAGAGCTAGGTCCAATGATGAAACTAA

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FIGURE 378

GTGGAGGAAGAACATTATACAAAACAAATTAGAAACTGGGATCATGAGTGGAAAAACAAA
GGCAAGAAGGGCTGCCATGTTTTAGACGTTGCTCTGAAGACGCCAGCGGTAGCGCCAGTGG
CAATGCTTGTTATCAGAGGACGAAAATCCTGATGCGAATGGGTAACTCGATCATGGAAGAT
TATTNTAAGTACAATGCTTACACTGACTTTCTTGTAGGACTCCTAAATCATCAGTGGCT
TAAAGAAACAGATGTTCCCTCAGAAATCCAG

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FIGURE 379

AGCCAAAATCCTGGCAAATTNGCATTC AANTCCGGAGGCCAAGAAAGGAAGAAAGTTC
CCCAGGTNGAAAANCAAAC TGGATTT CAGCAATATGGATT TATAATCAAATGTGGTTACC
ATT TGGGCCCTC CGGGGGATT TAAGTACTTTCCATACCTAGCTNTTATACATACTATTAT
TCTCATGGCAGTAGCAAC TTTGGTTCAAATATCCAAAACATGCTCAAAGTAGAACATTT
GTTTCAATATTAGGAAAGTGCTTGAATCCCCTGGACGACAAAAGCGTTGTCTGAGACAGCA
TGCAGACTCAGAGGAAAACAAGCAGAGAATAACAGGTGCCAGACTCTACCAAAGCATGTT
TCTACCAGCAGTGATGAAGGGAGGCCAGTGCCAGTACACCAATGATCAATAAAACTGGCTT
AAATTTCA GCTGAGAAGCCTGTGATTGAAGTTCCAGCATGACAATCCTGGATAAAAGGAT
GGAGAGCAGGCCAAAGCCCTGTTGAGAAAGTGAGGAAGTTCCGTGCCATGTGGAAGATAGT
GACTTGATCTATAAACTCTATGTGGTCAAACAGTTATCAAAACAGCCAAGTTCATTTTATT
CTCTGCTATACAGCGAAC TTTGTCAACGCAATCAGCTTGAACACAGTCTG

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FIGURE 380

CGGATCCTTAAAATCCCTGACCTNGACCCAAGGGTCCGGTAAAATCAATTGTNTTACCAA
AGACCAATTGGACATATCTGAATAGGATGNCTATAAATTATGACTTTAAATTGTTGTA
TTTTGTACTATTATCTGANATTTTATTTATGNATTTCTGTAAGTAGTTAGAGATA
ACATTTAAAAATCTAACAGATCAAGCAAATGAAGCTTATTTATGTATTCAAGTATAAAGC
CTTCAGTAAATAGGTAATATTTGTTTATTCTAGAAAACAGCTCCTGAACACAGTGAGCT
GGCTTTCACACATTGCAGTTGTTAGTGTACTGCCCTGCCATTTAATTATGAGGCTAAA
GATGTTTGACACCGCACATGTGTGTTATGGCTTCCTGATATGCTCTGACAGCTTTGG
CTGGCTTTTCGCAGAGTCGTTGAGAAGGTTATCTTGGCATTTAACAGTGATGTCAAT
ACAAGGTTATGCAAACCTCCGTAATCAATGGAGCATAATAGGAGAATTAAATAATTGCCTCA
GGAAGAACTTTACAGTGGATCAAATACAGTACCATCAGATGCTGTCTTGCAGGTGCCAT
GCCTACAATGGCAAGCATCAAGCTGTCTAC

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FIGURE 381

GAATAAGTTGGGATTTNAGCAAGGATCCAATNTGATTCTAAAAAGGAGTAGCCATAA
AGCCAGTGGTTTAATTAGATTCAAGATTGATTAAATTACGGGTTTCAGNTTCAGGGA
ATGCTACCCNCAAAATGAGATTCACTACTATACCAAGTGAAATTCTACTCTCANATTTC
TGTAAATGTCATTTCATAGTTAGGTTAGAAAGTATCTAATCAGGGTGTGATGGTCAAATA
AAGGGTTCAAACACATTCTATTTCTGNTTCAATAAATATTTTATATTGCTTATTCTTAT
CTATCTTACCTAATTCTCCTATCTTTCGNTAACCTTCTTTTTTATTTCTTCTAA
TGAAGATTCTGCTTCTTCATCTAACCTGTCCCCAAAACCTATGTACCAAAACTGGCAAGG
GTGATGTAAAGGATAAGTTGAAGCCATGCAGAGGCCAGGAAGAAAGAAATCAAAGGAGAT
CTAGAGACGAAAAACAAAGAAGAAAACAATATATTAGAGAGAGAGAATGGAACAGGAGAA
AGCAGGAGGTTATTTATTTACTTCTCGTAAAATATTGTTGCATTTTCATTAA
AATTGTATTTATTCACATTAAC

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FIGURE 382

GTCCATGGAGCTGGTGGTCAAGGTGGACAGGGGCGGTGGTATGGCGCAGTTGACACTGAAT
ACCAGCGCCTAGAGGCCTCCTATAGTATTGACCCCCCAGGGGAGGAGGACCTGTTGGTGCACG
TCGCCGAGGGGAGCAAGTCACCTTGGCACCATATTGAAAACCTTGACCTCTTCTCTCGAG
TTTATAATCTGCACCAGAAGAATGGCTTCACATGTATGCTCATCGGGGAGATCTTGAGCTCA
TGCAGTTCCCTTTGTGGTTGCCTTCACACCTCCTGGTCAGCTGCGTGGACTATGACATCC
TATTGCCAACAAGATGGTGAACCACAGTNTTCACCCACTGAAACCCGTCAAGGTCACTCTGC
CAGACGCCTTTGCCTGC

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FIGURE 383

GGATGGGAAGGATCGATTAAAGGATTGGCTTTGGAANACTTACTGGTGGGAATAAGGTTGGC
CTTGTGCAAAGTCCCCAAGGCNTGACATTAGTTGCTGGCAAGGCAATTGATTCCCTCNTTCA
ACATCGCTTATGCAGCTTCTGTTCTCGGTAACTATGAATTGGATCGTGTCAAAAT
GTCCATTGGTCCTCTTCTGGTGGAGTGCTCTGCTGATCAACGTTCTGAAAGTGAGCCCATT
CAACAACGGTCAACTGGTCATGGGATCTTCGTCAAGAATGAGTTTGGCCCCCTCACCT
TATGGGCTATAATAAAATCCTTGAGTGTGGCAACCACAACCTTCTGACTGGGATTATTCA
GCTAATAATGGCGTATTGGGTTGGCTTCATTGCCACTTACCTCCGGAGTNTGCAATGAG
TGCTTACCTGGCTGCTGTGGCACTTCATATCATGCTGTCCCAGCTGACTTCATCTTGGGAT
TATGATTAGTTCCATGCCGGTCCCATCTCCTTCTTATGACATAATTACTGTGTAGC
TCTCCC

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FIGURE 384

TGTTTATGTCACCTACCTCNCCCTTTAAGTTGTCCNAGCAAACCTGCAGAATTTAGA
TGAACATGGNAAAATGTTACAATCTGTGGCCTGACTTGGTCAAGACCTGTACANAGATGA
AAACTTGGTGACTATACTGGGGACCAGCTTAAATCGGATGTATCTGTATTCATGTTGAC
ATCAACAACAAGATCGAGTTCTGACGCTCTGCAGGGCGATACGCAGCTCCTGAATTGGAGAT
AGCTCGCTGTTGTTGCTTCAGTCCTGGTGGAGAGGACACTGAAGAGCAGCAGCCGGGAA
GGAGGGACCACGGGTCAATTATGACGAGAAGAAAGGCACCGTCTACATCTACTCCTACTTCCA
CTTCGTGTTCTCCTAGCTTCCCTGTATGTGATGATGACCGTCACCAACTGGTTCAACTACGA
AAGTGCCAACATCGAGAGCTTCTCAGCGGAGCTGGTCCATCTNTGGTCAAGATGGCCTC
CTGCTGGATATGCGTGCTGTTGACCTGTGTACGCTGGTCGCTCCCCTGCTGCC

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FIGURE 385

AACAGGGGGCCGCTTGNTCCAGAAATGTTCCCTGGGAAAGTGGCATCACTTAATGACAT
TCAGCCAACCTACNGAATCCTGAAACCATGGTGGAAATGTGTTATGGATTACCTAGCTGTTGT
TATGTTAATGGTAGCCATCTTGCAGGAACCATGCAACTTACCAAAGATCAGGTGGTCTGTT
TGCCAGTATTGCCATCTCCTGTAATTCAAAGGCACATACACCACCAGGAAATGCCGAGGTCA
CCACCAACATCCCAAAGATGGAAGCAGCCACCAACCAAGACCAAGATGGCGGACAACAAACG
ACATTTCTTGGACATCTGCTGTGACACCTGACATACCTCTCAGAGCCACATATCCTCGCA
CAGATTTCGCACTTCAAATCAGGAGGCAAAGAAAGAGAAGAAAGATCCAACAGGTCGAAAAA
CAAACTTGGATTTCAAGCAATATGTATTTATTAATCAAATGTGTTACCATCTGCCCTTCG
GGTATTCTAAGTACTTCCATACTAGCTCTATACATACTATTATTCTCATGGTCAG

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FIGURE 386

ATCAAGTTGGTGAAGAAAGAACCTATGAAATCTGTACAAAAGATTGGGGCTTGTTCTCCTG
TTAAGTGGTGTACTGGTGTGATGACCGGAAGCATGGCCTTGATTGTTGGATTGGGTACACAAT
GCACCTGGAGGTGGCCATTAATTGGCACCACTCAAACACTCAGTCCATCTGATGCCAGT
GTTGAGTAAACTCAACTACTATGAAATTCAACCTAATGTTTCAGTTCACTTCCTTTGAAG
TGCAGATTCCCTCG

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FIGURE 387

TGGATTAATGGGGGAAAGGGCGAAAANGNCAAGGATCAAACGGNGAATTGGTGATT
TTCGGGTCCCTNTCCGCTTCCGCCGGNCAGCGCTGCCAAGGGTATATTCCTTTTNGA
TCCGTCAACAAGCCTTTAAACTGTTAAATGAGAATGTCTGGNTCANAGAGTACTACTC
ACCTGGCTTTCACACTCTTGTGANCATGNTGGTGTGAAANGGATGAGAAAGNCCTTG
GACTGGTTCCATATTCCAGTTGAAANTGANACTATCCTTGTGCTGCTGATTG
TGAAAATGGNTGGCGGTGTAAGTCTGGCTTGACCCTCGACATGGATCACACAATTAAAAA
AAAAAGCCTGGTACCTCATTGCAATGTTACTTAAATTAGCCTTGCCTCGCACTCTGNGGTA
AACTGGAACAGTTAC

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FIGURE 388

GTTAGGTGATCCAGGTTGGGTTTGCAACCCTGGGTCAATTGGCCCTNAAATTAAT
CTTCGGGGGGGGTCTNGCCATGGNCAGCCAAACATTTGGGNACATACCATTGGTTCTGT
AATCGGGGCCTTCAGTTCTGTGAAAGGGCNTGGCATTGCTATCAAGGANCTGTTGC
AGGAAGCNGNTGNTGCGGCATCCCCTGGNTGGATTCTGCTGNTGAGCCTCATCGTCTGTGT
GAGCACNCAGATTAATTACNTAAATAGGCCCTGGATATATTCAACACTCCATTGTGACTCC
AATATATTATGATTCTTACAACATCAGTTAACCTGTCAGCTATTCTTTAAGGAGTGG
CAAGATATGCCTGTTGACGATGTCATTGGTACTTGAGTGGCTTCTTACAATCATTGTGGGG
ATATTCTTGTGCATGCCCTAAAGACGTCAGCTTAGTCTAGCAAGTCTGCCTGTCTTT
CGAAAAGACGAGAAAGCAATGAATGGCAATCTCTAAATATGTATGAAGTTCTTAATAATAAT
GAAGAAAGCTAACCTGTGGAATCGAACACACTGGTAAAAATGTCTC

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FIGURE 389

AAAAAAAAAAAAAGAATNTGACTATACCATGGAAAAGCCNCCACTNTGCCACTTAAATA
AACATCAGGATCAGAGATTCCAAGAGGACAATNTGCATCAAGTNTTCACCAAGTGTAAAAA
GCGAAATAATGAAATAGGGAGCAGAATATGCCTGTTGCCATAGAAACGAGGTNTATTNTGT
CCTCAATTAGGCCTTTTTNTTCATAGTTACACCAGAACTAAAGTAAAAGTGGTTTCTG
TTCTTCTACTTCTCCCCATGAAATGGGCATATCATNTCAACACTTCACTCCAAGTCGCCACG
GGCAACCTTATGACCCTAGGTCCCTCCACCCCTAATGTATCATCATTGCCA

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FIGURE 390

AGGGCGCCATTGAGCCAAGTTCCAGTCGGTTCCGGCTCAGAATTTCCAGGAGT
GGTTCTGGGCAGTGGCTGTGGAGCAGGAATGGCGCAGTAGAGGGTTACTGTTCTCGGCCG
CCTGAGCTGTACCTTTAGTGTCCCTGCCTCCTTCAGCCGGCGCTGCGAG
AGCCCTACATGGACGAGATNTCCACCTGCCTCAGGCGCAGCGNTACTGTGAGGGCCATTCT
CCCTTCCCAGTGGATCCATGATTACATTACATTGGCTGTACCTGGTGTCAAGTGGAG
TGGTCAAACCTGCCATTGGATCTTGATGGTCTGAACATGTTGTCTGCTCCATTGGATGC
TCAGATTGTTAATCTCTCTCAGTGGCAACTCTATTACTATTTGCTTTCCACAA

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FIGURE 391

CCAGTTTCATGGACATAGAAAATTCCAAAAGAATAATAATTGAATTAAATTGGGGGG
GTTAAAAAAANAAAACCTAACTTATAAAATTATTATTNTATTTAACGCCTNTATCATATT
TTCCCCATCCAATTGTTGGTTCACTGGTCCAGCCTTATTACAGGCATATAAAAGAAATT
GTGAGATGTTTGCAAGCTTTTACTTGAGAGCTTTAATTGTATGTTTATGTGGA
TGAAGAGCATTATGTTTGCAATAGGTTCCAATATGCATTATTAGACATCTGTT
AAATGGTAATGTAGCATTATTGCTAAATTGAAAGGAAACATAGATGGAATTCCAAAATAT
GTACATTCACTGTTGGTTTCGTTTCATTGTTATTATTGTGAGAATGCTGTTATTGGG
GTTGTGTGTGAGTGCCCGTCAGCCAGTGATGCCTCGGCCACGCTGTGGGCCACCTCAGTCC
TGCTGGGTCTGGTGCCTGGACCCCACGTGCTTGTGGCCAGGCTGCCCTGGCGGGCCAT
GTGGCCTCAGACCACAAGAG

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FIGURE 392

CGTCTCCAGTCTACCTCCGAGAGATTAGCTGAAACACAGAATATAGGCCATTCGTGAAG
GGGTTTCTTTGCGGACAGAGGATCAGATGTTGAGAGTTGGACAAACTCATGAAAACCAAA
AATATACTGAAGCTCACCAAGATGCATTAAAACGGTTTGCAGAAGGTTCTGAAAGCT
CAAGCACTCACACAAAAACCAATGATTCCCTAACCGGAACCCGTCTGATTCTCTCGTTCTG
CTGCTATTGGCATTATGGACTTCTAAAAAACCAATTCTGTCCGCTTCCGGACAACA
ACAGGGCTTGATTCTGCAGTAGATCCTGTCCAGATGAAAAATGTCACCTTGAAACATGTTAAA
GGGGTGGAGGAAGCTAAACAAGAATTACAGGAAGTTGTTGAATTCTGAAAAATCCCGAACCC
CTT

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FIGURE 393

GGTCAAGTTCAGTAGTGGTCTCAATAAGTGTGTTAAACTTGCTTGGGTGATTGCAATCAGCA
TGGGATTGGCCATTCATGGCCCAATTCANATTCAAAGCGTCNACAGTTAGTCAGAAAGA
TACATGAAGATGAATTGAATGATATGAAGGATTATCTTCCCAGTGTCAACAGGAACAANAAT
CTTTATAGATTATAAGTCATTGAAAGAAAATCTGCAAGGTGTTGGACACCTANTGAAGCAG
AGAAGATGTCCTTGAAACTCAGGAACCCCTT

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FIGURE 394

GCAGTGGGTGATCATAGGCACTAACCTCAAACCTCTGAAGTTCAANAGATTGTCCCATGTCA
GCCTCCCAAGTAGCTGGACTATAGACAGGNGCCATCATGCCAGCTAATTATTTTTAATT
TTANAGAAGAGTCTGCTAGGTTCCCCAGGCTGGTCTCGAACTCCTGACCTCAAATAATCCTC
CCNCCCTCAACCTCTGAAGTAGCTGCAATGACAGGTGCAAGCCCAGTGTGTTGGCTAGAGTC
TCATGTTTCTAATTCAAAAAAGTTCCATAATGATTGATTGAGATTGTATTGAGTTAC
ACATTAATTAAAGAAGTGACATCTCATAATACTAACTTCCCCAAAAAGAACAGGGTATGT
TTTCCATTATATGAGTGGGGTTTTTGTGTTTACGTTGTAGTTCTTCATA
TAGGTTTGCAGAGGTTCCAAACTTCTGGTTCATGG

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FIGURE 395

AGCATGGAAAGGTAGGAACCNAGGGAAAGGGGCCCCCGAGCGCAAGGTGTCGGTGCCCACC
TTCAGNTGGAGGAGATTCAAAAGCATAACCTGCGCACCGACAGGTGGCTGGTATTGACCGCA
AGTTTACAACATCACCAAATGGTCCATCCAGCACCCGGGGGCCAGCGGGTCATCGGGCACT
ACGCTGGAGAAGATGCAACGGATGCCTTCCCGCCTTCCACCCCTGACCTGGAATTCGTGGCA
AGTTCTGAAACCCCTGCTGATTGGTAAGTGGCCGGAGGAGCCAGCCAGGACCACGGCA
AGAACTCAAAGATCACTGAGGACTTCCGGCCCTGAGGAAGACGGCTGAGGACATGAACCTGT
TCAAGACCAACCACGTGTTCTTCCTCCTGGCCACATCATGCCCTGGAGAGCATTG
CATGGTTCACTGTCTTTACTTGGCAATGGNTGGATTCCCTACCCCTCATCACGGCCTTGCC
TTGC

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FIGURE 396

AATGGTACAACAGTCCCTTAATGGTTGCCNCAATGGCNTGAAATCCAAGNATTACAGACTTT
GTGATAAGGTNAAGCTTGGGCATCGTCCTAGAAACGGTGGCCACAAGTGGGTTGTGACCTC
GGTGGCCTTCATGCTCACTCTCCGATCCTCGNTGCAAGGTGCAGGACTCCAACAGGCGAAA
AATGCTGCCTACTCAGTTCTCTCCTGGGTGTGTTGGCATCTTGGCCTCACCTTCGC
CTTCATCATCGGACTGGACGGGAGCACAGGGCCCACACGCTTCTCCTTTGGGATCCTCTT
TTCCATCTGCTTCTCCTGCCTGGCTCATGCTGTCAGTCTGACCAAGCTCGTCCGGGGAG
GAAGCCCCTTCCCTGTTGGTGATTCTGGGTCTGGCCGTGGCCTCAGCCTAGTCCAGGATGT
TATCGCTATTGAATATATTGTCTGACCATGAATAGGACCAACGTCAATGTCTTTCTGAGCT
TTCCGCTCCTCGTCG

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FIGURE 397

GACCTCGACCCCAGGGTCCGGTTNTACTTGTCTGCCTGCTGCTGGGTCCCTGGGTCTATG
TGCATCCTCTTCACTATCTACTGGATGCAGTANTGGTGTGGGCTTGCCCTGGAATGGCAGCA
TTTACATGTTCAACTGGCACCCAGTGCTTATGGTGCTGGCATGGTGGTATTCTATGGAGGTG
CGTCACTGGTGTACCGCCTGCCAGTCGTGGGTGGGCCAAACTGCCCTGGAAAACCTCCTCC
ATGCAGCGCTGCACCTGATGGCCTCGTCTCACTGTTGTGGGCTGGTGCTGTCTTACGT
TTCACAACCATGGAAGGACTGCCAACCTCTACTCCCTCACAGCTGGCTGGCATCACCACGT
TCTTCCTCTCGCCTGCCAGTGTTCTGGCTTGCTGTCTCCTGCCCTGGCGTCCA
TGTGGCTGCGCAGCCTCTAAACCTATCCACGTCTTTGGAGCCGCCATCCTCTCTGT
CCATCGCATCCGTCTTCGGG

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FIGURE 398

AGAGGAGCTGCCGGTGCCTCCTCAGAACATCTCCTGATCGCTACCCAGGACCAGGCACCAAGG
ACAGGGAGTCCCAGGCGCACACCCCCCATTCTGGGTCCCCAGGCCAGACCCCCACTCTGCC
ACAGGTTGCATCTTGACCTGGTCCTCCTGCAGAAGTGGCCCTGTGGTCCTGCTCTGAGACTC
GTCCCTGGCGCCCTGCAGCCCTTCTATGACTCCATCTGGATTGGCTGGCTGTGGGAC
GCGGTCCGAGGGCGGCCTGGCTCTCAGCGTGGCAGCCAGCTCTGCCACCATGGCAA
ATGCTGAGATCTGAGGGGACAAGGCTCTACAGCCTCAGCCAGGGCACTCAGCTGTTGCAGGG
TGTGATGGAGAACAAACTATGTACCTACACACCGTCAGCGACTGTGACACCAGCTCCATCTGT
GAGGATTCCCTTGATGGCAGGAGCCTGTCCAAGCTGAACCTGTGAGGATGGTCCATGTCAC
AAACGGCGGGCAAGCATCTGCTGTACCCAGCTGGGTCCCTGTCGGCCCTGAAGCATGCTGTC
CTGGGTCTACCTGCTGGTCTCCTGATTCTGTGGCATCTTCATCTTAGCAGTGTCCAGG
CCGCGCAGCTCCCTGACGACCTGAAGGCCCTGACTCGCAATGTGAACCGGCTGAATGAGAGC
TTCCGGGACTTGCAGCTGCGGCTGCTGCAGGCTCCGCTGCAAGCGGACCTGACGGAGCAGGTG
TGGAAAGGTGCAGGACGC

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FIGURE 399

ATCCTGGACTTGACCCAGGNGTCCGTTGATTGGAACCGGTGGTCGGCAAAACAAGTCCGCTGG
GCAGCAGGAGNAGCAGNAGGATTATTAAATAACGCAGTTGGACTCTGGCAACTGGGAGTGAAG
AGGAGGCCAACAGCCGAGAAGGGAAGGAGGCANAGGAGGGGACCAGAAGGACACCCCCGTGC
CCCGAAGACATAAATCCCTGAGTGCCCAGGAGCCTTAACAAGCGCACGGAGCCCTCAAGG
TGCAAAGTTGGCTTCACAGTGCAAGCCTTGATTCCAATGGGGACTCAGGATCAAGACGA
TCTACCCTGGTCTCCCGTTGCCAATATTCAAGAAGTATTAAACAGAAGACATGATTCTCTT
CCTTCTCACCTTCTTCCAGTAATACAGTTGGTGTCCACAGTTCCCTCCTCCAGCACTAAC
TCAAGCTCAGGTAGCACAGGTAAACGGAGGAGCATATTCCGTACTCCCTCCATTAGCTTCCAC
CATAGAAGGGAGTGAGCCTAAGCAAGAGCCTACCAACCAG

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FIGURE 400

GGCTTCCCTCGGCCACCGNCTNTCCGAAGGCGGCTCCCTCCCTGCGCAGCCGGAGC
CCCTGAGATCAGCCTCGAGCAGGCAGCCGAGCGAGACTATCCCTAACGGAACGGCGGTGGC
CGACTCGCGAGTGAGGAAAAGAAGGAAAGGGCAGACTGGTCGCGAAGAGAAGATCCAGGCCTC
AGAGGAGGAGAAAGGCCGGAGCCAGCCGAGCTGTACGACCGGAGGGGGACTCGCAGCCTTA
CCAGGGGGGTGATGTTTACAGGCACTTAAGTATTCACTCGAAGAGTCACCCAGTAGCGGTGA
TCACAGACATGAAAAGATGCGAGACGCCGGAGATCCTTCACCACCAAATAAAATGTTGCAGGAG
ATCTGATAGTCCTGAAAACAAATACAGTGACAGCACAGGTACAGTAAGGCCAAAATGTGCA
TACTCACAGAGTTAGAGAGAGGGATGGTGGGACCAGTTACTCTCCACAAGAAAATTCACACAA
CCACAGTGCTTCAAGTTCAAATTCACATTCTTAATCCAAGCAATAACCCAAGC

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FIGURE 401

TAACAACCACAGAAACTGGANTAGTGGCCTACAGTAGCTGCAGCTGATAACCACTGAAACTAA
TTTCCCTGAAACTGCTAGCACCAAGCAAATACACNTTCTTCCAACAGNTACTTCACCTGC
TCCCCCCCATAATTAGACACATAGTTCCCTCCACAATTCTACACCTGCTCCCCCATAATTAGT
ACACATAGTCCTCCACAATTCTACACCTGCTGCAGACAGTGAGTCAACCACAAATGTA
AATTCTTAGCTACCTCTGACATAATCACCGCTCATCTCAAATGATGGATTAATCACAATG
GTTCCCTCTGAAACACAAAGTAACAATGAAATGTCCCCACACAGAAGACAATCAATCATCA
GGGCCTCCACTGGCACCGCTTATTGGAGACCAGCACCCCTAACACAGCACAGGTCCCAGCAAT
CCTGCCAAGATGATCCCTGTGCAGATAATTGTTATGTGTTAAGCTGCATAATACAAGTTT
TGCCTGTGTTAGAAGGGTATTACTACAAC

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FIGURE 402

CCACAGTATGGAAGAATAATCCCTGACTTCTAGCCCTGTGCGCCCTCTTTGTTCTGCTGTTG
CTACTAATAGCCTGGAGATCATGGTGGTGGTCACTCTCTTGCTTCAACTCACTATAAAA
TCATTGTCCAGACCTGGACAGCCCTGGTGTGAAGCGCAGGTCTTGAATAAAAATCTTTC
CTTCAGTACAACAGTGACAACAAACATGGTCAAACCTCTGGGCCTCCTGGGAAGAAGGTAAAT
GCCACCAGCACTGGGGAGAATTGACCCAAACGCTGGAGAAGTGGGCGAGACCTCAGGATG
CTCCTTGACATCAAACCCAGATAAAGACCAGTGATCCTCCACTCTGCAAGTCGAGATG
TTTGTCAACGTGAAGCAGAACGGTGCACTGGTGCATCCTGGCAGTCGCCACCAATGGAGAG
AAATCCCTCCTTTGACGCAATGAACAT

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FIGURE 403

GTGGGGTGGTACGGCCGCTCCCTGCAGGNAGTTCGTGNACGACGTGTGGCGATCGTGA
ACAAACCCCGACGTGCGGGCCCGCGCCCCGCTCCGTTGGGCATCTCACCAACGACTNTG
GGGCAAGGGCATGGCCGAGAACACCAGCCACAAGTCCTACGCCGCTTGCCTCCTCACCTTC
AAGCTAACATATTTTGACTGGTATGAACCCATTCTACTTCATGCAGTAAATATAATTTA
CACTGCTTAGTGAUTCTTGCTGATGTACACCTGTGATAAAACTGTCTCAAGAATCGTGG
CTTGCTTTGTAACGGCATTGCTTTGCTGTACATCCTATTCAACTGAGGCGGTGGCTGGG
ATCGTTGGCAGAGCGGACGTGTTAGCGTGTCTGCTGTTCTATTGGCCTTCTCGTACAAC
AGGAGTCTGGATCAGGGCTGTGTTGGGGAAAGTTCCCTCACGGTGTCTCCCTCTTCTTG
CTGCT

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FIGURE 404

CTTGTTCGGTGGAAATATGTTGGGATTATGTTGCCTCTGAACAAAGTGTCTTGCTCACA
TCGTAAATGACTTCTCTCCGAAACGCTAAATATTCTTCCCGCAGGAGCTCATATCCTTATT
TTCCATGACAGATCTAACGGACAATATATGCAAAAGATATATAAAGATGATAACTAATATAG
TTATACTGAGCCTGATCATTGCATTCGTTAGCTTCTGGATTATATCAATGACTGCAAGCA
CCTATTATGGTAACTTACGACCTATTCTCCGTGGCGTTGGCTGTTCTGTTGTTGTTCTG
TTCTGATCGTCTCTAATGGCCTAAAAAGAAAAGTCTAGATCACAGTGGGCTCTAGGAGGGC
TAGTCGTTGGATTTATCCTAAC

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FIGURE 405

AATGCCCAAGTTAAATACCTCCTCNACCTTACNTAAGTGCTCCTTATTATTTAT
TATTATTATTATTATTATTGAGATGGAGTCTCACTTGTAACCAGGNTGGAATGC
AATGGCATGATNTCAGCTCACTGCAACCTCCGCCTCNTGGTTCAAGCAAGTNTCCTGCCTCA
GCCTCCGAGTAGCTGGGACTACAGGTGCACGCCACCAGCCTGGCTAATTTTGATTTAG
TAGAGACGGGTTTCACCGTGTGCCAGGCTGGTCGGAACTCCTGAGCTCAGGCAATCCGC
CCACCTCAGCCTCCAAAGTGTGGATTACAGGCATGCCACCATGCCAGCT

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FIGURE 406

GGGCTTGAATCTAAACTTGAAATTAGAATAATATCTGTGTTAGAGCTTAAATT
TCAAATATNTGCTGTCCACACACCCCCATTGGAGGAGGACCTGTGTCACTAACCAAATTGTA
GCTGAGAAAACAGAGGCAGAGAGAGGTTAAGTAAAAACCCAAGAGAGTTCACCTAATATTG
TGAAGAAAGCAAACCCAGGGTTCACTAACTTGTCCATGTGTGTATGTGTGGCTGCGTTCA
CCCCTGTGTGTGTGTACTGTGTGCATGCCTGTGTGTTGTGCACACCCATGTGTATGTACC
TGCATACACACCCAAGTGTGTGTTACCACAACGAAAGCGCAGATTATTGAAAAGAAAGTG
CACTCCACAGAGTGGGAGCAGGCTAGAGCCAGTGGCTCAGGAGCCTGGTTACAGCATTCTG
GAGTTAAGTGCCCTCCAGAGTTTCCCATTG

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FIGURE 407

CAGCCAGGCCAGAGAGGGAGCCGAGCCAGGCCATNTCCAACCATGTCCGANGAGGCCTCGGCC
ATCACTTCCTACGAGAAGTTCTTAACCCCCGAGNAGCCCTCCCACTCCTGGACCTTCCTC
GCGGGGGGGCACCTGCCCGAGCAAGGAGCCGGCTGCCTGGACATCAAGCGACTCAGGTGCC
AGCTGTCCCTGCCATCGCACCGACCCGCTCCACCGCTTCCACACCAACAGGTGGAACCTAA
CTTCTTGTGGAACAAGTGTGCCAGCTCAGAACGGCAGTGAGGAGCTGTTTCATCTGTGTCTG
TTGGAGATCAAGATGATTGCTATTCCCTGTTAGATGATCAGGACTTCACCTCTTTGATTAT
TTCCTGAGGGGAGTGTCTGCAGTGATGTCCTTCTATTAGCACTTACTGGGATTGGTCAG
ATAGCGAGTTGAATGGCAGTTACCAAGGCAGTGACATTGCCAGTGGAGTGATGTACTTTCTG
ATGTCATAACCAAGTTCACCTGCCTG

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FIGURE 408

TCAAAAAGGTTGCATTCTTGCATAAACAGGGACTTATATAGTTAACTCCCNTTATATAA
ATTCTCCTATAGTAATCTCAAAGAGTATTNTAGACTTCTCAATGCTTTATTGTTGCTGAAA
AGCAAAAAGACTTGCTGTGNAAGTGGAGAAGACTTCACACATCAAAGTGATTTTCTACTCTC
CTAGGAATGAAAGGAACACAAAGGGACCCGGAAGCATTCTGTCCAGATTGTGTCAAAATCT
CAATTGCCATCTGAGAATAGAGAAGGTAAAGTGCTGTGGACTGGCTGGTTCTGCTGTGTATTT
GGAGACAGTCTTCTGGAGACTGTTCAGAAGATTCACCTGTCTGCCCTTATTCTTGCAAAT
GGAGCAGAGTCTAACACAGCAATAATTGGAACTTGGTTTCAGAAAACCTTGACTGTTATTTC
AGTCCTTAGCAATCAATGCATTAAATCTTCCTGGATGGCTGCCATGTGGACTGCATGCAA
ATGGACCATTATGTGGCTACTACTGAATTCTTGGTCTGT

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FIGURE 409

GACATTATTTCATCCATTGCAACCCATTGCCATAAGAACATNCCCATTGGCCTTGAAGCGC
TTCACAGCAGCATNGTGAATGCAGAATTGGAGCCAAGCAATTTCAAAGCAAGNTTNCTGAA
AATGAAAAAAAATACTTATATTGAAAAACTTTTGAGCGTTATGGTAAAAATGGAAGATTATC
CTTTTTGGTTTGNAGAAACTTTAACAAACTTGGCCTTGGAGAGAGAGAAAAGTAGTTGAGAT
TAATCATGAGGATCTGGCACGATCATGTTCTCATTAGATATTTGGCAGTTCAAGAGGG
AAAGCATTTCACTCACATAACCACCAAGCATTCCATAATCATTAAATTCAAGAAAATCAAAC
TGTGACCAGTGTATCCACAAAAGAAACCATAATGTGATCCAGAGAAAGAGACAGTTGAAGT
GTCTGTAAAATCTGATGATAAACATATGCATGACCATAATCACCGCCTACGTATCACCATCG
TTTGCATCATCATCTTGATCATAAACACACTCACCATTTCATATGATTCCATTACTCCAG
TGAGCGTGGAGCGGCCGC

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FIGURE 410

TACCTATTCCCAGGTTAACATGTTGATTATTTATGGAAAAAANTGATTGTANAAACTGG
GTANATTACTTCAAATTAATCATTATTCTAATTGACCAGGGATGAGTGAGATGTTATTT
AGAAAACAAATAATTTAGATAGGAAAATTGAATCTTAAAAAATAATGGTGATTAAATATAT
CAATGTGTGGTTTGTGTATGTGTGAANATTGGAGCATCCAGGAGTGTGCAGGTGTAT
ATGACCTTATTTCTACTGTATCTTAGAGGTTGCCNCTTCATGGGTATAAAACTTAATTGG
ATTCTCGATTTTATTTGTTATGCACTTTACAACTTATGTCATTTAGGTTGTTATTA
ATGCCAGTTGTATAATAAAATTATTAGAGAAGTTATGAAGGAGGATGGCATGAGTGGGCG
GCCGN

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FIGURE 411

ACGCAGAGCGTTTCATTTCCACGGGTCTGTCCTGTCAAAGCACACCCCTCGGTGTCCAGG
TTCNTCATGGCAAGTGCTCGGGGTGACAAANAAGGCGACATTGACTACAGCACC GTGCTCCT
CGGCATGCTGGTGACGCAGGACGTGCAGCTCGGGCTTTCATGGCTGTCA TGCCGACTCTCAT
ACAGGCAGGGCACCAGTGCATCTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTGAT
TGGTCAGATTCTTTTCACTAGCGCGGTTTCTTTATGTCTTGTATAAAGAAGTATCT
CATTGGACCCATTATCGGAAGCTGCACATGGAAAGCAAGGGGAACAAAGAAATCCTGATCTT
GGGAATATCTGCCTTATCTCTTAATGTTAACGGTCACGGAGCTGCTGGACGTCTCCATGGA
GCTGGGCTGTTCTGGCTGGAGCGCTCGTCTCCTCTCAGGGCCCCGTGGTACCGAGGAGAT
GCCACCTCCATCGAACCCCC

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FIGURE 412

CAGTTTTTATAGTGAATACCAAAANCATCAGCAANCACGGACTGTCAACCCAAGGTTAT
TGATATTCGGAGTTGATTCTGCGATTAAGAGACGTTGGCTGCCTCNTCGTATCATTG
TGAGCCTGGCTATGGCATTGTGAAGCCTCGTTAGGAACAGTCATGCACCGGGTATCGGAC
TGGGGCTCTATACTTAATCTTNCAGCTGTTGAAGGCCTGATGAGAGTCATTGGGGTTCTA
ACCATTAGCTGTTCTTGATGACATTAGCAGTTATTGACTCCATTGGTGTGGT
TCATTTTATTAGTTGGCACAAACTATGAAGACCTAAGGCTAAGAAAGAACACTGTGAAAT
TTTCATTATAGACATTTAAAAACTCTGATCTTGCTGTGCTGGCTCTATAGTGTAA
TGGGGTGGCGGCCGC

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FIGURE 413

ACGTGGTCTGCCTGTTATTGGAAAGATATATTAAGATCCAGTTCTGGATTNCANCTGTTATT
TTTTGGGAAATGCTTNAAAAAGCAGTTTTATAGTGAATACCAAAACATCAGAACACTG
GACTGTCAACCCAAGGCTTATTGATATTGCGGAGTTGATTCTGCGATTAAGAGGACGTGG
CTCGCCTTCTCGTGATCATGTGAGCCTGGGCTATGGCATTGTGAAGCCTCGTTAGGAACAG
TCATGCACCGGGTGATCGGACTGGGCTTCTATACTTAATCTTGCAGCTGTTGAAGGCGTGA
TGAGAGTCATTGGGGTTCTAACCAATTAGCTGTTGTTCTGATGACATTATTTAGCAGTTA
TTGACTCCATTTGTGTGGTCATTTTATTAGTTGGCACAAACTATGAAGACCCTAAGGC
TAAGAAAGAACACTGTGAAATTTCATTATAGACATTTAAAAACTCTGATCTTGCTG
TGCTGGCTTCTATAGTGTATGGGTGGCGGCCGC

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FIGURE 414

ACCGGCCGTGAGCCGCCNTGCGCCGGCAGGTCGCCGGACATACTGTGGCGCGTTTGGGCT
GGAGGGATAGTTGCAAGTATTGTTGGTCAGTGCTATTCTACCCATCTGCACCACAGTATTAA
TAATTTCACCGAGGATTGATTGTTCATCCTATAACAGTGGCTGTNTGATTCTTCAGTGACC
TGTATAGTCCTATGTAATCTTTACTTCCTGCTGTCAGTGGTAATAATAATAAGTA
TTTCAATGTGGAGTTCTATGCAGTTGTGCCCTCTATTCTGCTCCAGACTAGCTCTGATAG
GGAAGATCATTCATCCTCAGCAACTCATGCACTCATTATTGCTGCAATGGGAATGGTGA
TGGCCTGGTGTGCTGCAGTGATAACCCAGGGCCAGTACAGCTTCTGTGGTCCCTGCACTG
GTACTAACAGCTTGGTAGCCCTGCTGCGCAAACCTGCTAAATGAATATCATTTTTTCC
TACTGACTGGAGCGGCCGC

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FIGURE 415

GNCCACACTGGCAAACGGGCATCATGGNCACACTGCCNAAATAGGCCGCATGTTGCAGC
AGGATAGTAATGATGACCTGAAGATGTTCACTGTTGATGCGGAAGAGGAGNCAGTAAATA
GACCAAAAAGCCAAAATCAGACATCCAGTAGCATCGTTTCCACTTATTCTTCGAGTCA
GTGCAATCATCGTCTATCTCTGTGAGTGCTCAGCAGCAGCTTATTACCTGTATGGTGA
CAATTATCTTGTGTTGTCGTGTGACTTTGGCAGTGAAGAATGTCACAGGTAGACTAATGG
TTGGCCTACGTTGGTCCAATCACATTGATGAAGATGGAAAGAGCCATTGGGTGTTGAATCTA
GAAAGGAGTCCTCTCAAGAGAATAAAACTGTGTCAGAGGCTGAATCAAGAATCTTGGTGG
GACTTATTGCCTGTCCAGTACTGTGGGTGATATTTGCTTTAGTGCACTCTCCTTCAGAG
TAAAGTGGTTGGCGGTGGTTATCATGGGTGTGGCGGCCGC

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FIGURE 416

CAGCAGTCCTTATGATTATGGAGGAAAGTGGAGGNCCCTTATAGCNAAACAGGTATGCTGGNT
ATGACNTATTCGCAGCAAAGGCAGATTTGTCCCCTCCAGACATGATGCAGCCACAACAGCCAT
ACACCGGGCAGATTNCCAGCCAACTCAGGCATATACTCCAGCTTCACCTCAGCCTTNTATG
GAAACAACTTGAGGATGAGCCACCTTATTAGAAGAGTTAGGTATCCAATTTGACCACATN
TGGCAAAAAACACTAACAGTATTACATCCGTTAAAGTAGCAGATGGCAGCATCATGAATGAA
ACTGATTGGCAGGTCCAATGGTTTTGCCTTGCTTGGAGCCACATTGCTACTGGCTGGC
AAAATCCAGTTGGCTATGTATACGGGATCAGTGCAATTGGATGTCTAGGAATGTTTGTAA
TTAAACTTAATGAGTATGACAGGTGCGGCCGC

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FIGURE 417

TAATTGTTATTGGAAATGGAGGATTAAGNACATTTCAATTTGCATGNAGAGGAAGAC
CTGAAGGTTCAGCATANTAGCTACAAGACAGANGGCCGGCTGTTNAAGGACCAGCTCTCCC
TGGNAATGTGCACTTCAGATCACAAAGATGTGAAATTGCAGGATGCAGGGTGTACCGCTGC
ATGATCAAGCTATGGTGGTGCCGACTACAAGCGAATTNCTGTGAAAGTCAATGCCCATACAA
CAAATCAACCAAAGAATTGGTTGTGGATCCAGTCACCTCTGAACATGAACATGACATGTCA
GGCTGAGGGTTACCCCAAGGCCGAAGTCATCTGGACAAGCAGTGACCATCAAGTCCTGAGTGG
TAAGACCACCACCAATTCCAAGGGAGAGGCGGCCGC

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FIGURE 418

AGGTGCTTGTGCTCGAACCCAGTGGTTGGGCGGTGCTCCTCAAGCTTGTGCCTGCTAAC
NTCNTGNGTCCGGGNTGGCAAGAGTGTGGACTTCCCCCTGGCGNCGTGGACAACATGATG
GTCAGAAAAGGGGACACGGCGGGTGNTTAGGTGTTATTGAAAGATGGAGCTTCAAAGGGTGC
CTGGCTGAACCGGTCAAGTATTATTTGCAGGTGATAAGTGGTCAGTGGATCCTCGAGT
TTCAATTCAACATTGAATAAAAGGGACTACAGCCTCCAGATAACAGAATGTAGATGTGACAGA
TGATGGCCCATAACACGTGTTCTGTCAGACTCAACATACACCCAGAACAAATGCAGGTGCATCT
AACTGTGCAAGTCCTCTTAAGATATATGACATCTAAATGATATGACCGTCAATGAAGGAAC
CAACGTCACTCTTACTTGGCCACTGGGAAACCAGAGCCTCCATTCTGGCGACACAT
CTCCCCATCAGCAAAACCATTGAAAATGGACAATTGGACATTATGGAATTACAAGGGA
CCAGGCTGGGGCGGCCGC

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FIGURE 419

TAAACTACACTCAGTATAACAGTGATAGTGGGATTGAACACCTGAAGCTCCCCATCAAAGGGA
ATGAACCTCACATGAAGACTTATAACCCCTGCCTCTCCGGGTTGGAAATCTGGTTCCGGTTT
TTCTTGTTGGTGCACCTTCATCGTCACTGCCTGTTGCGCATTCCCTCCGGAAATTTCC
ATGAGAGACTGGGGCATCGAGCAGAAGTGGATGTCTGTTCTCCTGCCTCTGCTGCTACTTAC
AATGATCCGTTCTTCCCCCTCTCCTGGTCAACAGCTGGCTCCAGGGATGCTGGATGAC
CTCTTCAGTCATGTTCTGCGCCCTGCTGCTCTGGCTGTGCGTGTACCACGGGATT
CGTGTCCAGGGAGAAAGAAAGTGTAACTTCTATTGCCTAAATTCTCATTGTTGGACTA
TTGTGGTTGGCTTCTGTTACGCTAGGAATATGGCAAACAGTTAACGAATTACATGATCCAATG
TACCAAGTATCGAGTTGATACCGAAATTTCAGGGAATGAAGGTCTTCTCATGGTGGGGCA
GCGGCCGC

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FIGURE 420

GTGTCTGCTGCCCTCCGACGCTGCTCAGGAATTGCAAGAAACTGAAGTTTGATTCAAGATA
TATTTGAATTGAAACCAGAGATGTTNTAGAGTTAGATTCTTCATTGATTAAGGTATGGT
CTGAATATCGTTGCTTGGCAGCTCGGGTCAACTATAAGACTTGTATTATCTGCGCACTC
TTCACTTGGTCACAGTACTTTGTGGAATAAGTGTCCAGTGACAAAGCAATCCAGTTCCA
CGGCCTCGAGTAGTGGCTTCAGAGTGGATGGGTTGAAAAAAGAGCAGCAGCATCTGAGAGT
AACAACTATATGAACCACGTGGCAAACAAACAGTCTGAGGAAGCATTCCCTCAGGAACAGCAG
AAAGCACCCCCCTGTTGGGGCTTCATAGCAATGTGGAAAGTAAGGTGTTAGGGCTCAAA
TATGAAGAAATTGACTGTCTCATAAATGATGAACACACAATTAAAGGGAGACGAGAGGGGAAC
GAAGTCTTCTTCCATTCACTGGGTTGAGAAATATTTGATGTTATGAAAGGTGGTGGCG
GCCGC

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FIGURE 421

AGGCTCCCGTGTCTGCTGCCCTCCGACGCTGCTCAGGAATTGACAAGAAACTGAAGTTTG
ATTCAGATATATTTGAATTGAAACCAGAGATGTTAGAGTTAGATTCTTCATTTGATTA
AGGTATGGTCTGAATATCGGTTGCTGGCAGCTGGGTCAACTATAAGGCTTGATTATTATC
TGC GCACTCTTCACTTGGTCACAGTACACTTGTGGAATAAGTGTCCAGTGACAAAGCAATC
CAGTTCCACGGCGTTCGAGTAGTGGCTCAGAGTGGATGGTTGAAAAAAGAGCAGCAGCA
TCTGAGAGTAACAACTATATGAACCACGTGGCAAACAACAGTCTGAGGAAGCATTCCCTCAG
GAACAGCAGAAAGCACCCCTGTTGTTGGGGCTTCAATAGCAATGTGGGAAGTAAGGTGTTA
GGGCTCAAATATGAAGAAATTGACTGTCTCATAAATGATGAACACACAATTAAAGGGAGACGA
GAGGGGAACGAAGTCTTCTTCATTCACTGGTTGAGAAATATTTGATGTTATGGAAAG
GTGGGGCGGCCGC

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FIGURE 422

TTCTTTTTTCCCCNGCAATTTTCAGTGAAANACATGGAGTCTTCATCTGGAGAGTT
GTCAGAGTCAAGATTTGCTGTTGAGCCAGTGCTTAAAACAATTACAAAGACTTCTAGG
AGAGGAAGAGAGNCTGAGGGAAAGAAGAGATAACAGAAAAAGAAAATGNCAGGATTGAACCTGGA
AACTCACAGAACATCTGACTCATGCTGGAAATGTNTTGGGTACCTCTGCCTTNTGTGTT
GGCGGC GGCGC

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FIGURE 423

TGAAAGGACCCCTAGTCCCCGGCAAATGNTTTNTCAATCCCCACTTCATTTCCTTAA
GAGCCATTCCAAGTNTCTCCTTNTCGATAACCCAACCGAGCTCACATCCACTCAAGGGGTG
AGATGCCCTCCTCACCATTAAGAGAGATCAAGCCCCAGGGGGAACAGCTCAACTCCCCCT
CTGTCTCTCGAAGAGCNCCTGTTGAAAACTCGAGGCAGCTGTACCCGTGCGAAGTTCTT
GCTCCCGTCTCCCCATGTCTTCCAGGATTTCTTCATAGTGGGGATTACTCGCTAACCTTC
CTTCCTCACCTACTTCCCCTTCTCAGCTTCACCGTGTAAATCTCTAATAATTCTT
TTTATGACATCTTGTTTCAAGCTCTCCAGTGATCCACTTCTCCAATGGCCCTT
TCACTAACCTCCAAATTGTCTTGCTGACATTATTGAGCTGCTATTACATGTTCTAAATG
CTTACTTGTCGTATTAATCCTAACAAACCTACAAGGTAGGCCTGCTATTATCTCCATT
TTATAGTTGAAGAAACTGAGGCTGCCGCGGCCGC

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FIGURE 424

TATCGGCACATTGGCAAAGACAACATTCAAGGCCAATGGCCCACAAATTGGTCCGCCAATGC
CATTNTGAAAAGGNTTCACTGC_{AA}ATTAC_{AA}AGCATCCNTNATGAAAAGAGATTGGAAAGG
CCTCTCCAAGCAACTGGACTGGGATGTTGAAGCATTCA_GGGCTGGTCGCAAAGACGCAATC
AGGANAAGCCAAGCACGGCTGACGAGGTCTGTGAGAGCATGTGGANATTTCATTTACCT
TTATGTATTACCTACGGAGTCAGATT_CCTGAAAAAGACCCCTGGTTGTGGAATANGAGGCA
TTGNTGGTACA_ACTACCC_CTATCAGCCACTCACA_ACTGAC_CTTCACTACTATTACATCCTGGA
GCTGTCGTTTATTGGTCTTGATGTTCTCAGTCNCTGATATC_AAAAGAAAGGACTTGG
CATTATGTTCTGC_ACTACCNTGTATCTATTTCTGATTACCTTTCATATGTCAACAATAT
GGCCCGAGTAGGAACGCTGGTC_{TT}GTCTCATGATTCA_GCTGATGCTCTGGAGGCTGC
GGCCGC

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FIGURE 425

ATTTTTGAAATTAAATGCNTGAGCTTATTTGTTAATTGTTATGCCACTGGATTGGACAGC
ACATCACCTCTGAATTGAAAGACCTTAATGTGTGTTAGCCATTGNAAAGCTACTCAAGTGC
TGTGCAAGAGTCATAACCCACATCCCTTGATCAAATTTACTACACGAGCTGCACTGACATTCT
AAACTGGTTAAATGCACCGCGCACAGAGTCAGCTATCGGACAGCCTATGACATGGGGAGAA
GACTATGACAGGCGCAAGTCTCAGTGTGTCCTGGATTTATGAAAGCGGGAAATGTGTGTC
CCCCACTGTGCTGATAAAATGTGCCATGGTCGCTGTATTGCTCAAACACCTGTCAGTGTGAG
CCTGGCTGGGGAGGGACCAACTGCTCCAGTGCCTGCGATGGTGATCAGTGTGTC
ACCAGCCGGTGCCAGTGCAAAAATGGGCTCTGTGCAACCCATCACCGGGCTGCCACTGT
GCTGCGGGCTTCCGGGCTGGCGCTGCGAGGACCGCTGTGAGCAGGGCACCTATGGTAACGAC
TGTCACTCAGAGATGCCAATGCCAGAATGGAGCCACCTGCGACCACATCACGGGCTGGCGCCGC

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FIGURE 426

TTTCAATGAAAAAAAGAATCCAAAAAAAAGTTGTCAGCCTCATTGTGCGTCATCCCTT
ATTTCTGGGATCTCAGGACCTCTGCCCTCTCATTCTCACCTCTGAGATCTGCACATCTT
TTACCCAGGAGCCTCAGAGCTCCTGAGTCTGGTGTGCCTATCCCCATCTTCACTGTTAGTC
CTCCTGCAGATTCTGTGTCTCCTTCATGTAGGTGCTGGATCCCTGTGTGGAGCGGCCGC

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FIGURE 427

ACAAAGTTCCAATGACTTGTAAAAGTCATGGTAGCTCAAGATGGAACCNCAATGTA
CATTAATAACAAAAGTTCACACGGCAAAGGACNCNTCACATGTGCAAGGAAATGTGCGGAG
ATTATTGGGCTCACCTGGGTACNTGAACACTACACTCAGTATAACAGTGATAGTGGGATTGAAAC
ACCTGAAGCTCCCCATCAAGGAATGAACCTCACATGGAAGACTTATAACCCTGCCTCTCCC
GGTTGGAAATCTGGTCCGGTTTTCTTGTGGTGCTCACCTCATCGTCACTTGCCTGTTG
CGCATTCCCTCCGGAAATTTCCATGAGAGACTGGGCATCGAGCAGAAGTGGATGTCTGTT
TCCTGCCTCTGCTGCTACTTTACAATGATCCGTTCTCCCCCTCTCCTGGTCAACAGCT
GGCTCCCAGGGATGCTGGATGACCTCTTCAGTCCATGTTCTGTGCGCCCTGCTGCTCTTCT
GGCTGTGCGTGTACCAACGGGATTCGTGTCCAGGGAGAAAGAAAGTGTAACTTCTATTG
CTAAATTCTCATTGTTGGACTATTGTGGTGGCGGCCGC

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FIGURE 428

GCATCCGCTTGACTGCATNTGAGTTTCCCAGTCTGTCTTGGGATGGGCCATGCCATAGT
CTTGATGTCTTGTGCCGTGTATTTGCAGATAAGATGACTTGGCCATGGCCNCAGATCA
CTTATTCTGGGAAGTGTAGGAACAGTGGTGCCTAACCCAAGTTCTTACATGATGTACCTT
TTCCTTCTAAAAAATAACTAAAAATATGAAATATACTAATTGTTTAGATATTACATACA
ATTGGAAAGTGGACAAGTCCCTGTATATGCTGTCACTTTCAAGAACCTGAGAATGATCCTCG
GAATTGCTGTTACTTGTGGCTGTTCACTACACAAGATAAGGTAGGTCTCATACAAACTTG
TTTGTTTGTGTTGGAGACAGAGTCTCGCTCTGTTGCCAGGCTGGAGTGCAGT
GGCGTGATTCGGCTACTGCAACCTCCGCCTCCGGATTCATGCCATTCTCGCTCAGCCT
CCCGAGTAGCTGGACTACAGGTGCCTGCCACCATGCCTGGCTAATTTATATTCAGTAG
AGACGGGAGCGGCCGC

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FIGURE 429

TTAATTTAAAATATGAAAAGTAAAATGGGATTTGTCTTATTGTGTTNNANAGCTGGCTT
TTCACACATGCAGTTGTTAGTGTACTGCCCTGCCATTAAATTATGAGGCTAAAGATGTT
TTTGACACCGCACATGTGTATGGCTCCTGATATGCTCTCGACAGCTCTGGCTGGCT
TTTCGCAGAGTCGTTTGAGAAGGTTATCTTGGCATTTAACAGTGATGTCAATACAAGG
TTATGCAAACCTCCGTAAATCAATGGAGCATAATAGGAGAATTAATAATTGCCTCAGGAAGA
ACTTTTACAGTGGATCAAATACAGTACCACATCAGATGCTGTCTTGCAAGGTGCCATGCCTAC
AATGGCAAGCATCAAGCTGTCTACACTCATCCCATTGTGAATCATCCACATTACGAAGATGC
AGACTTGAGGGCTGCGGCCGC

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FIGURE 430

GGCCCNCACTGGCCAAAATAGTTGGAATGCCTTTNTTATTCAACCAATGGGGCCAAGGGGAA
NAGTGGGTGTTGGGGGGCCTTTGCACCATCATCACATCCCTGGATACTTGTAAACCAATTT
GCCTGTAGGCCATCATGACTGTAATGAGTGTGGACAGGTACTTGCCCTCGTCCAACCATT
CGACTGACACGTGGAGAACAGGACAAGACCATCCGGATCAATTGGCCTTGGCAGCTTC
CTTTATCCTGGCATTGCCTGTCTGGGTCTACTCGAAGGTCAAAATTAAAGACGGTGTGA
GAGTTGTGCTTTGATTGACATCCCCGTACGATGTACTCTGGTATACTTTATTTGACGAT
AACAACTTTTTTCCCTACCCCTGATTTGGTGTGCTATATTAAATTTATGCTATAC
TTGGGAGATGTATCAACAGAATAAGGATGCCAGATGCTGCAATCCCAGTGTACCAAAACAGAG
AGTGATGAAGTTGACAAAGATGGTGCTGGTGCTGGCGGCCGC

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FIGURE 431

AGGTGTCACCATGGCAAAGCTCCCTTCTGATTCTCTCGAGTTGTTGAAGCGTNTACGGTT
NCACTGACGGATTCAAGCTCATTTACCTCAGCTTCATTGAAACTACCTCTATCTTGAG
TCTTCACTCATTCGGATTAAGCAACATCACCATTGACCACTGTCCACACAACGCCATT
ACATTTGACTGCCGGGATTCAAGCAACATCACCATTGACCACTGTCCACACAACGCCATT
TAACTGAGTCTTCTTGTTCTCAACTCTGACACCTCCTGACGACCAAATCAGTGCTCTAGACG
GTCACGTGTCTGTCCTGGCCTCTTCTCAAAGCCATTCCCACTGAGCTGACCGTCGTGGCC
CATCACTCACACCCACAGAGGTGCCACTGAACACCTCCACGGAAGTGAGCACAACCAGCACCG
GTGCTGCCACTGGTGGTCCCCTCGACTCCACCCCTGATGGGTGACGCCGCAAGTCAGAGCCCCC
CAGAGAGTAGTGCTGCTCCTCC

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FIGURE 432

ACACTCAGAACAGGAGNAATTGGACTAATTTCAAACACTACAGACACTTCTAATCATGATGC
ATTTCAAAAGTGGACTCGGAATTAACTGNGTTGAAAACATGNCACTGCCGAGGATGATAA
CATTAGCAATGACTCCAATGATTCAACCGAAGTAGAAAATGGTCAGATAAAATAGCAAGTTAT
TTCTGATCGTAAAGTAGAAGAAGTCTCACAAACAGCCATTGGAAAAAAAGAAGTGTGATGA
GTATATTCCAGGTACAACCTCCTTAGGCATGTCTGTTAACCTAACGCAACGCCATTATGGG
CAGTGGGATTTGGGACTCGCCTTGCCTGGCAAACACTGGAATCCTACTTTCTGGTACT
TTTGACTTCAGTGACATTGCTGTCTATATATTCAATAAACCTCCTATTGATCTGTTCAAAGA
AACAGGCTGCATGGTGTATGAAAAGCTGGGGAACAAAGTCTTGGCACACAGGAAAGTCGT
AATCTTGGAGCCACCTCTCT

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FIGURE 433

CCAACCCAATTACCAAGCAGATNCTTTGGGGGATTCCAGCCATCAGACAAGGAACCCATGGC
AGCTGCAGGGTTTTGCATTGTGCAAGCTTATGCTTCAGATNTGAGAGCCGATTAAC
AAANCAAGAGTTCCAGACCNTTCTTTGGGTGTATCACTAGCTGCAGGTGCTGTGTTCT
TAGTGTCATCTATTGACTTATACAGGTTACATTGCACCATGGAGTGGCAGGTTTATTCAATT
GTGGGATACTGGGTATGCAAAAATACACATTCCAATTATTGCATCAGTGTCTGAGCATCAACC
TACGACTTGGGTGTCTTCTTGATCTACATATTCTTGATGTACCTTCCCAGCAGGCCT
TTGGTTCTGCATCAAAAATATCACAGATGAAAGAGTATTGTTGCTCTATATGCAATCAGTGC
TGTCTACTTGCTGGAGTGATGGTGCGACTGATGTTGACTTTGACTCCAGTCGTGTATGCT
GTCTGCAATTGCCTTTCAAATGTTTGAGCACTATTGGGGCTGCGGCCGC

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FIGURE 434

ATTCAGCTGTTATTTGGAAATGCTGAAAAAGCAGTTTATAGTGAATACCAAAAC
ATCAGCAACANTGGACTGTCAACCCAAAGGCTTATTGATATTGCGGAGTTGATTCTGCGATT
AAGAGGACGTTGGCTGCCTCTCGTGTGATCATTGTGAGCCTGGCTATGGCATTGTGAAGCCT
CGTTAGGAACAGTCATGCCGGGTGATCGGACTGGGCTCTATACTTAATCTTGCAGCTG
TTGAAGGCGTGATGAGAGTCATTGGGGTTCTAACCATTTAGCTGTTGATGACATTA
TTTAGCAGTTATTGACTCCATTTGTGTTGATTTTATTAGTTGGCACAAACTATGA
AGACCCTAAGGCTAAGAAAGAACACTGTGAAATTTCATTATAGACATTTAAAAACTAC
TGATCTTGCTGTGCTGGCTCTATAGTGTATGGGGCGAGCGGCCGC

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FIGURE 435

GGCCACACTGGCAAAC TAAATTTGGTATTGCAGATGACGCTCATATTGGCAACTTACTA
ACATCAAAATTCTTAGTTATAAGGATTTGATACTTATTGTATACTGTGCAGCGGAGTT
GACTTTATGGAAAAAGAGACTCCACTGAGATA CACAAAGACATTATTGCTTCCAGTTGTTCTT
GTAGTGTTGTTGCTATTGTTAGAAAGATTATTAGT GATATGTGGGGTGTCTAGCTAAACAA
CAGACACATGTAAGAAAACACCAGTTGATCATGGAGAGCTGGTTACCATGCATTGCAATTG
TTAGCATATACAGCCCTGGTATTAAATTATGAGACTAAA ACTCTTCTTGACACACCACATG
TGTGTTATGGCATCACTGATCTGCTCAAGACAGCTATTGGATGGCTTTGCAAAGTACAT
CCTGGTGCTATTGTGTTGCTATATTAGCAGCAATGTCAATACAAGGTTCAGCAAATCTGCAA
ACCCAGTGGAAATATTGTAGGGGAGGCGGCCGC

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FIGURE 436

AGGGTTTAATAGGACTANCAGTACGATGGCAGTGTCTNTAATTTTATTCAAGGNCTGGT
AANCCGCCTATGTTGGTATTATGAAGCTCAGAGACCTGGCAAGAAATAACTTTAATTAA
CCGGTCAAACAATGGTATTTACCAGCAGTGATAACAATTACAGTATTGGGATTGGATTAC
CCACCTCTACAGCTTACATAGTCCTATGTGCATATGTGGCAAAGTTATAAATCCAGAC
TGGATTGCTCTCCATACATCACGGTGGATATGAGAGTCAGGCACATAAGCTCTCATGCGTAC
AACAGTTTAATTGCTGATCTGCTGATTACATAACCTGCAGTGGTTGTACTGTTGTTGCTT
AAAAGAAATCTCAACTAAGAAAAAGATTGCTAATGCATTATGCATCTTACTGTATCCAGGCCT
TATTCTTATAGACTATGGACATTTCAATATAATTCTGTGAGTCTGGCTTGCTTGTGGGG
TGC GGCCGC

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FIGURE 437

CACTGGCAAAAATCGATGCGAGGCCAGNAAGCACGCTGAAACCNTGGCGCGCAAGCT
GTGCGACTNTTTGCGGCCGGCCTGGCAGGTGTCTCCTCGAGAGGCAGGCAGGGATCCCG
GACACTAGCTTATCGTCATCTGGAAATTGTTAAAATGCAAATTGCAAGTTGAGAGCCA
TGGTTCCAAGAAACTGCATAAGCATACGAAATAAGTTGCAGCCTCCGACTTATACCTGGTA
CTTCTAGTCTAACACAGGATTGACTCTACTAATCCAGCCTTATACAGGATGCTGTGTTCTT
GCTCCTTGTAATGCTGTTGCTGGTAGCTGGTTATGCTCATGATGATGACTGGATTGACCC
CACAGACATGCTTAACTATGATGCTGCTCAGGAACAATGAGAAAATCTCAGGCAAAATATGG
TATTCAGGGAAAAGGATGTCAGTCCTGACTTGTCATGTGCTGATGAAATATCAGAATGTTA
TCACAAACTGATTCTTAACTTATAAGATTGATGAGTGTGAAAAGAAAAAGAGGGGTGCGGC
CGC

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FIGURE 438

AGAAAAAGAAGAATCAACGTAATAAGATAAANGATTCAAAATAAGATNTCTGAAGAGAA
ATAAGAATCATTACAAAAGCAGCAGAGAAAATTTACAGATGAAGGAGCCAGCTATTAAAG
ATGGGCATCAAGGTTCTCCAGCAGTCTAAAAGCCAAAACAAAAGAAGAAGCCTACCTACTT
TTGCCAAAGCAGCTGACATGGAAACTTGAAAGCTATGGAGAAAATGGCTGACGCTTGCTA
TTGGAAATTTGGCGTGCAAAATATAACAGCAGCTATCCAATTATATGAGTCCTGGCTAAA
GAAGGATCATGTAAAGCCCACGCATTAGGATTTGTCTTATGGAATAGGAATGGAA
TATGATCAAGCTAAGGCACTGATATATTACACCTTGGAAAGTGCTGGAGGAAACATGATGTCC
CAGATGATTTGGGTACAGATATTGTCGGGAATCAATGTTCTACAGAATTGTGAAGTTGCC
CTAAGTTATTACAAGAAAGTGGCAGATTATATTGCTGACACATTGAAAAAG

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FIGURE 439

TTTGTTGCCTGGGTGTTCTCACACTCTGCAAGTTTACTGCAGGGTTATCGAGTTTCAT
GAATGATCCTGCCATGAATCGGGCATGACAGAAGGAGTAACGCTGTTAACNTGGCAGTGC
AGACTGGGNTGATAGAACATGCAGGTTGTTCATCGGGCATTCTGCTCAGTATTATCCTTTTC
ATTGTCNGTAGCTTCTATCCTACAGTCTATGTTAGAAATTGCAGATCCTATTGTTTGGCACT
GGGAGCATNTAGAGACAAGAGCTTGTGGAAACACTCCGTGCTGTAAGCCTTGTATT
ATTGGTATTCCCTGC

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FIGURE 440

ACCAACCTTGGCCATTATTTGGCCCTTGTAAACCAATAACTGCNTATCCAGATATGCCACA
NTTTTGCTGCTGTGGCANCCNTGATAGGTGCTCTTGTAAATCACATGGATGTTATATA
AGAGTTGGGCCGGCCCAGCACACAAGGTCAAGCATGTGCTCTNTGTCAGCTCTCGCTATAGC
TGTGTCAGATCGTTATCTTCAGAAAGCTGGCATTGCCAAGAACATCAACTTCTATAA
TGTGAGGCCTCCTCTGACCCCTACACCATTCAAATAGCTCAAGTGCTTACTTGTGAAAA
CGCAGGGGATAATTATAACTGCAATCGATGGCAGAAGACAAATGGTGTCCACAAAATACACA
GTACTGTTGACAGTTCATCACTTCAACCAGCCACGGAAGAAGCACATCCATCACCAAAAGTG
TGCTCCAGAAGTGAATGTCATTTGTCGGTTGCCACCACAGCCGAGATTCTGAACATACGGA
GTGTAGGTCTTGCTGTGAAGGAATGATCTGCAATGTAGAATTACC

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FIGURE 441

ATTTATTTGCTAAATTGAAAGGGAACATAGATGGAATTCCAAAATATGTACATTCA
GCTGTT
TGGTTTTCGTTTCATTGTTATTATTGTGAGAATGCTGTTATTGGGGTTGTGTGAGTGC
CCGTCAGCCAGTGATGCCCTGGGCCACGCTGTGGGCCACCTCAGTCCTGCCTGGTC
GCCTTGGACCCCACGTGCTTGTGGCCAGGCTGCCCTGGCGGGGCCATGTGGCCTCAGACCA
CAAGAGCGGAGCTGCCCTGGCCAAGCACTGCAGCTGCCTGCACCCCCGGG

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FIGURE 442

CGACCGCCCTTCGCGGGCAGNAAGGCCAGGGGTGCTNAGTTCTTCACCTCCTTTAGACTN
AAGATTTGCCAAGTTCCGGCATTGNTCTTGAGGATCTCAGAAGGGCTTTAACAGCAAGACT
GCAAATGGGTGNGTATTCGTATGAACCGAATGAATTCCCCAGAACAGTGGTTCACTCAGCG
CAGGGGAATGGCTCTTGGGATTGTTATTCTCTGCTTGTGATGTGATATGGGTTGCTTCCT
CTGAACTTACTCGTATGTTTACCCAGTACAACAAACCATTCTCAGCACCTTGCAAAAA
CATCTATGTTGTTGTACCTTGCGGCTTATTATTGGAAGCCATGGAGAACAGTGT
CAAGAGGACTTCGCGGAAAGCATGCTGCTTTGCAGATGCTGAAGGTTACTTGCTGCTT
GCACAAACAGATAACAACATGAATAGTTCTTGAGTGAAACCTCTGTATGTGCCTGTGAAATTCC
ATGATCTTCCAAGTGAAAAACCTGAGAGCACAAACATTGATACTGAAAAACCCC

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FIGURE 443

GACCTCGACCCAAGGGTCCGCGGANGGGTGGGACTGGTCATGGATCTTNGTCAAGAATGAGT
TTCGGCCCCCTCCTACCTTATGGGCTATAATAAAATCCTTGAGTGTGGGGCAACCACAACCTTT
CTGACTGGGATTATTCAGCTAATAATGGCGTATTGGGTTGGGTTCATGCCACTTACCTTC
CGGAGTCTGCAATGAGTGCTTACCTGGCTGCTGTGGCACTTCATATCATGCTGTCCCAGCTGA
CTTCATCTTGGGATTATGATTAGTTCCATGCCGGTCCCCTCCTCTTATGACATAA
TTAATTACTGTGTAGCTCTCCAAAAGCGAATTCCACCAGCATTCTAGTATTCTAACTGTTG
TTGTTGCTCTGCGAATCAACAAATGTATCAGAATTCTTCAATCAGTATCCCATTGAGTTTC
CCATGGAATTATTCGATTATTGGCTTCACTGTGATTGCAAACAAGATAAGCATGGCCACAG
AAACCAGCCAGACGCTTATTGACATGATTCTTATAGCTTCTGCTTCCTGTAAC

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FIGURE 444

ACAGTTGTGGGAATCACTGTCCTGGTAGAAATTCTGCATTTATATTATTTCTTGGCT
ATATTCCCAAAGCTGGATTAGCACTGCTATGAACCTTCACATAGATGAGCAGGTTCATAGGC
CACTTGACACAGTGAGTGGCCTCTTAAATCTCGTTACTCTACCATGTCTGGCTGTGGTG
TCTTCTCCTGACGACTTGGTATGTCTCATGGATACTCTTCAAAATCTATGCCACAGAGGCTC
ATGTGTTCTGTTCAACCACCATTGCAGAAGGGTCAGATGAGTGCCTTCAAAAGTGTAA
ATAGCAATCCTCCCCCATCATAAAGTATTTAGCCTGCAGGACCTGATGTTGCTTCTCAAT
ATTCTCCTCACGAAGACAAGAAGTTTCAGCCTCAGCCAACCAGGTGGACATCCCCACAATT
GGACAGCCATTCAAGGGAGTGTGAATCTTTAAATGGTATGACTCAGAAACTGATTCTCT
ATCAAGAAGCTGCTGCTACGAATGGGGGCATCATGCGGCCGC

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FIGURE 445

TTCATGGTAAAAATGAAC TACCCCTGCCATAAAGTTNTAATGGGAAAGGAAGAGACATT
TCAGCNTGGACGTGGATGGCCGC GTTCTGGTGGT GATAGTTACCTTG GCATAATTCTCCCTC
TGTGTCTCTGAAGAAC TTAGGGATCTTGGCTATACTAGTGGATTTCCNTGAGCTGTATGGT
TTTTTCCTAATTGTGGTTATTACAAGAAATTCAAATTCCCTGCATTGTTCCAGAGCTAAA
TTCAACAATAAGTGCTAATTCAACAAATGCTGACACGTGTACGCCAAAATATGTTACCTCAA
TTCAAAGACCGTGATGCTTACCCACCATTGCATTGCATTGTTGCCACCCGTCAGTCCT
GCCAATTACAGTGAGCTAAAGACCGATCACAGAAAAAAATGCAGATGGTTCAAACATCTC
CTTTTCGCCATGTTGTTATGTACTTCTTGACTGCCATTGGCTACTTGACATTCTATGA
CAACGTGCAGTCCGGCCGC

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FIGURE 446

GNCCACACTGGCAAAGGTTGCCGCTAGCCGCCTGGGAATTAAAGGGACCCACACTACCTTC
CCGAAGTTGAAGGCAAGCGGTGATTGTTGTAGACGGCGCTTGTATGGGACCTGTGCGGTT
GGGAATATTGCTTTCTTTGGCCGTGCACGAGGCTGGCTGGATGTTGAAGGAGGA
GGACGATGACACAGAACGCTGCCAGCAAATGCGAAGTGTGTAAGCTGCTGAGCACAGAGCT
ACAGGCAGGAACGTGAGTCGACCGGTCGATCTCGANAGGTGCTGGAGCTGGGCAGGTGCTGGA
TACAGGCAAGAGGAAGAGACACGTGCCTTACAGCGTTCAGAGACAAGGCTGGAAGAGGCCTT
AGAGAATTATGTGAGCGGATCCTGGACTATAGTGTTCACGCTGAGCGCAAGGGCTCACTGAG
ATATGCCAAGGGTCAGAGTCAGACCATGGCAACACTGAAAGGCCTAGTGCAGAAGGGCCCTGC
GGCCGC

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FIGURE 447

AAGTTTTTTTAATTATCATGGACGGGTTNTGGATTTAATGGGGGAAAAGGGCGGAAAAG
GACAAGGATCCAAACTGGGAATTGTTGATNTTNGGTCCCTNTCCGCTTCGGCCGGCAG
CGGCTGCCAGGGTATATTCCTTTCCGATCCTGCAACAGCCTCTTAAACTGTTAAATG
AGAATGTCCTTGGCTCANAGAGTACTACTCACCTGGCTTCACACTACTCTTCTGATCATG
TTGGTGTGAAACTGGATGAGAAAGCACCTGGAACTGGTCCTCATATTATTCCAGTCTGG
ATATTGATACTATCCTCTTGCTGCTGATTGTGAAAATGGCTGGCGGTGTAAGTNTGGC
TTTGACCCTCGACATGGATCACACAATTAAAAAAAGCCTGGTACCTCATTGCAATGTTA
CTTAAATTAGCCTCTGCCTCGCACTCTGTGCTAAACTGGAACAGTTACTACCATGAATCTA
TCCTATGTCTTCATTCTTATGGGCCTGCTGGCTGGGCGGCGC

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FIGURE 448

TAATTAAAATGCACACACACACACACAGAAATTTGAGAGCCATTTAATATAATTG
CCTCCCTAGAACATACCTTTAGGAATTTTATCACTAAACCACATGTTATTAAATACGT
ACATGTTAACATAAAATACATACATAAAATTCACATGCATACTAACACTTATGTTAAATATA
TTCAATGTATATACATATGTACACAATATGCATATATACATGTGGGTATGTGGTATGTGTG
CATGTGTGTATGCCAGCTACATAATTGTGGACTAAGGGCAAAATGAAACTGTACGCC
CTCGTTAAAAATTAGGTGTGGGGCGGCCGC

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FIGURE 449

CCAGTTGTCAAAC TACTACTCTTCAATGCTCTACATAGCATTCTTAAGGGCAAATTGTA
GGCTATCCAGGAGACCCAGTTATTGGTTGGAAAATACAGAAATGAAGAGTGTGACCCAGG
TGGCTGTCTTCTTGA ACTGACA ACTCAGCTTGACAATAATCATGGGAGGAAAAGCAATCTGGA
ATAACATACAAGAAGTATTATTGCCCTGGATCATGAATCTAATTGGCGATTCACAGAGTT
CTGGATCAGAAAAGATAACCCCACGATGGAACAGGACTACCATCTGCAGCCTATGGCAAAC
TGGGATTATTTATGAATATCTGAAATGATTATTCA GTTGGCTCGTCACCTTATTGTGG
CCTCTTTCCACTGGCCCTCTGTTGGCTCGTGAACAATATATTGAAATAAGAGTGGACG
CATGGAAACTGACCACCCAGTTAGACGCCCTGGTACCAGAGAAAGCCAAGACATTGGAGC
GGCAGCCC ATCATGCAAGGAATAGCAATTCTGGCTGTGGCGGCCGC

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FIGURE 450

CTGTTAATGATTGCATTGGCCTTGCTGGGGGGCATTTCCTGCGGATCAAACCCNCGAAA
GNGTNTTCATTCCACGTGTCTGTCTTGTCAAGCACNCCTGGTGTCCAGGTTCTTCATGG
CCAGTGCTCGGGTACAAANAAGGCGACATTGANTACAAGCCCCGTGCTCNTGGCATGCTGG
TAACNCAGGACGTGCAGCTCGGGCTTTCATGGCCGTATGCCGACTNTCATACAGGCAGGCG
CCAGTGCACTTCTAGCATTGTCGTGGAAGTTCTCCGAATCCTGGTTTGATTGGTCAGATTC
TTTTTCACTAGCGGCCGTTTCTTTATGTCTTGTATAAAGAAGTATCTCATTGGACCCCT
ATTATCGGAAGCTGCACATGGAAAGCAAGGGAACAAAGAAATCCTGATCTTGGGAATATCTG
CCTTATCTCTTAATGTTAACGGTCACGGAGCTGGACGTCTCCATGGAGCTGGG

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FIGURE 451

ATCCCAGGCCTTAGGCCCCGGAATNAACAATTGCAATGCACGTTAAGGAAAAGGCCATNTC
GGATTCAGACCCTNACGGCCTCCCACANTTGTCNTCACTTGCAACAGGGCTNGGGTGGC
CTCCCGTTNTAAAGCACCCNCTATGAATGCACAGCAGGNCAANACCCAAGTCCAAGACTG
CCTGGGCCTACTGGCCCCCTAGCATTGTGCAGAGGTNTCCTNTACAAGCTCCATGTTGGG
AANAAGCACAGACCCACCAGGACCCCTGTTNTCCCTCAGATCCCCCTGCCACCTTTC
CCACTCCGGGACTCAGCCCAGGACACCTCGNTGATTCCCTGCCCCCTTACACCTGCAAGCAG
GGATGCCGGCATCAGAAGAATGTTNGTGTGAAATTGTTGAGGGGTTGGGTTATTTT
GTTGGTTTTCTTTTTGCTTANGTGGC

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FIGURE 452

ACGGCGCTCCCGCCGAAATCAAAGCTCCGAGTCATCCGTGTGGGGCATTCTGTCCCCCTGG
CACAGTTGGCCTCTTCCAGAAGCCC GTTTGTTGTTACGTNTAAATT CGCGTCGGTTCT
TATTCTCTCCCTGGCAAGGTCTGAANACGGTAGGGAGAATAACCTGTGTCAGCGTGTATGA
TGCCGTCCCGTACCAACCTGGCTACTGGAATCCCCAGTAGTAAAGT GAAATATTCAAGGCTCT
CCAGCACAGACGATGGCTACATTGACCTTCAGTTAAGAAAACCCCTCTAAGATCCCTTATA
AGGCCATCGCACTGCCACTGTGCTGTTGATTGGCGCCTTCTCATTATTATAGGCTCCC
TCCTGCTGTCAGGCTACATCAGCAAAGGGGGGCAGACCGGGC

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FIGURE 453

GTCATTTACATTCTAGTCCTCCTGCATCTCCTCAAGGTTCCCTCACAAAGGTTACACACT
TATTCCATCAGCTAAATCTGNCAACTTGCTGACTCCAGCCATAGTGAGATTNTTCNCGGTC
CAGCATCGTGAGCAATTGTTCTGTTGACTCCATGCTGCAGCTCTACAGGATGAACGGTGTTC
CTCTCAGGCCCTGGCAGTCCCTGAATCCACTGGGCATTGGAAAAGACAGAGCACGCTTCAGG
GATAGGAGATCATAGTCAACATGCCCTGGTGGACACTCTTGAAGCCATCTAATCAAGTG
TTTAGCTGTCTCATCGTCTGTGAGCAATGAAGAGATTCTCAAGAGCATATCATTATAGAAGC
AGCTGACAGTGGCGTGGAAAGTTGGACTTCGTGTTCAAGCAGCTCCATGACAACCTCCAAAG
CCTTCCAAACCCAAAAAGCTGGGATTTTGAACTCTTACAGACATAACCATTGGATGACCC

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FIGURE 454

TTATGCTTTCTTGCAGTATNTGAAAGGCCGATTAACAAACAANAGTCCAANACCCCTT
TCTTTTTGGGTGTATCNCTAGNTGCAGGTGCTGTGTCCTAGTGTCACTATTGACTTAT
ACAGGTTACATTGCACCATGGAGTGGCAGGTTTATTCAATTGTGGGATACTGGGTATGAAAA
ATACACATTCCAATTATTGCATCAGTGTNTGAGCATCACCTACAGACTTGGGTGTCTTCTT
CTTGATCTACATATTCTGTATGTACCTTCCCAGCAGGCCTTGGTTNTGCATAAAAATAT
CAACGATGAAAGAGTATTGTTGCTCTATATGCAATCAGTGTCTACTTGCTGGAGTGAT
GGTGCAGTGATGTTGACTTGCAGTCGTGTATGCTGTCTGCAATTGCCTTTCAAA
TGTTTTGAGCACTATTGGGGGGAGCGGCCGC

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FIGURE 455

GCCAGAAAACCCTTAAGAAAAAAAGCGNAGGAAATTCGCCAAGCTGAAAGATNCAGCGG
CCTGAGAAAAAGTTGCCCAAAAGNNNTGTTNNAAAAGCCAAGGAGGAAGCCCCCTTT
NTCCCTNGGGCACTTGTATTTTNAACCTGCTTCCCCAAATCCCCACTNATGAGGATCAG
CCCCTGGTGGTATTTTGCATGATTCCTGNCTGGAGTCCTTNTCNGGTCAACGGTTT
CTTGTTATATTGCNCTATGTAGCTGATGTCAATTCAAGGAGCNCGGAGNGAAGTACAAGCTTA
TGGATGGGTNCTCAGCCCACCTTGCCTAGTNCTTCAGCAGCCCCGGGCCATTGGAGCAT
ATNTTTCTGCCAGTTNCGGAGACAGCCTCGTTGCTGGTGGCCNCAGTGGTGGCTTTN
TGGACATCTGGTTCATCTTAGTGGCTGTTCCAGAACCTNTGCATGAGAAAATGAGNCCNGGT
TTCCTGGGAGNTGCAGCCGC

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FIGURE 456

TCCTTGTAAACATGAAGGGCCCCGGTAGCCATGGTTGCCACCTCATTCCAAGCACCCG
CCCCAGCAAGGCCTCCTGGTACCTTGTCANCCACTGTTAGAAGGTGATGCCGATGGAGA
AGCAGTAGTAGANAAGCACCAGCCCCAGGGTCAACNCCGCTTCCACAAAAGCCACATCGAG
GGCCCNCCCTCCCCATTCGTGGCGGCTGCAGCACCGGAGCTCCTGAGTCAGCAGGGGCAGGCAC
CCCTNTTGAATAACAATGTGCAGGAAGAGCCGGTGGAGTTAGACCACAGCTTCACCAAGAACG
TCTCCAGGCTGGAGGAGCTCTGCAGCTCCATGATTGGAACCATCAGCAGAGCCCCAGGCA
GAGTCCTCACCTAACGGGCTGGTGGCTGGTGCCTGACCCATGGTTAATTGGATGCAGCG
CTCACAGGTCCAAGGTCTGCTCGGCCCTGGAGCTCCAGGCCGGAAATTGGCCAGTGTGGCC

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FIGURE 457

TGCTCCCCTCTCCTCCACAATCTACCCATTNTGCATGTGCCGGTGCCCTTCCTGTCA
TCCCACCTTCTCTGAGACTGTGTTCTTTCTTAATTCTGTTCTGTTCTTAGGT
TGCA TAGTCTTATTGATATTCTTGAATTCACTGATTCTGCCAGCTCAGTCTGTTGTT
GAGCC

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FIGURE 458

GATTACAAAAACAAAAATGTTAATTAAAGTGAAAGGGNTTAATAATTAACTGGGANTT
AATAATTCACTGGAAATTTAAATGAATAGTTACTATAATCNCATAATTGAGAGTCACCTT
TNTTTTCCCCAAAACATACATGAAAGGTCTGTGTGTAAGCTCTGATTTCAAGGACCCCTA
TTTNTGGAAGCAGAGTAACGGAAATANTAAAGTCAAGATNTGAAAACCATTGAAGTTAACCA
AAAAGCACAGGCTACTAAGGCAGGTGCAGCATCAATGATTCACTACATGGTTCTGATATCAGC
TCGCTTGGTACTACTCACTTGTGGATGGGTACTTGTGGACCTCGTCAATCTCTTCG
AAGCCATTCAAGATAGTAGAGCACATCTTCTTCAC
CTGTTTCATCAAGATAGTAGAGCACATCTTCTTCAC

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FIGURE 459

CGGTCCGAATATCCGGAACCTGACCCAATCCTGGCCTTGAAACTTCATTNTNGTTGTC
TGCCTCAACNCGTAGGTGGNGCCAAACNTTGGTAAAGTCNAGATCCGGGGAGGGTACTTC
ATGGCCTTGGACTCCATATTNTNTGCATNTACGTGGTGAAGGCCCTGCTCAAGATCATGCC
CTGGGCCTCTGGTACTTCTTGACTTCTGGAACAATTGGACTNTCATTATGCCATGGC
CGTGCTGGACTTCTGCTGATGCAGACCCACTCCTCGCCATCTACCACCAAAGCCTCTCCG
GATCCTCAAGGTCTTCAAGAGCCTGCGGCCCTGAGGGCAATCCGGTCCCTGCCGTCCATCGCAGC
CTTCCTGACCAGCGTCCAGGAAGTGACAGGGACCCTGGGCCAGTCCTGCCGTCCATCGCAGC
CATCCTCATCCTCATGTTACCTGCCTCTCCTCTCCCGGGTCCCTCCGGGACTGTTCCG
CAAATCTGACCCCCAAGCGCTTCCAGAACATCTCACCAACCCTTCAACCTCTTCACCTT

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FIGURE 460

CAAAGAAAAGAAAAGGGCACTTCGGAGCAAATCATACTAGGCCTTGATGCTTAATTCTT
CTTCAGTTCATTAAGTAACTACTAAGGAAAGGTTAAAAACTTCCCCTCAAAAGGAATCAA
CCCCAGGAAGTAATCATTACAACGATTTCCCAAATTTGACAATCTGTCTGGAAAGCAAA
CCCCTTTAAAATCTAATGTCGGGCTTGAGTATTAGCTCATTAGGGTGGACAAATGCATT
ACTGTTTCAAAC TGCTCACATTATTCACTGCTATCTCCAAAGTTGCTATCTACTCAGCCTTAT
GAATGCCCTCGCTTCTAAGGCCATGTGAAAATCACGGCACTGCCCTAGCCTGTGTCAT
CTGCTTTTCGTTCTGCGATATGCCAGTTCCCAAATCAATTATAGGTACCTGTTAGGAGAG
AGGAAGATTTACCTCTCAAAGGGTGAGATTGAAATTACACTAAAAGACAACTTACATT
TAATGCTTCACTTAATGAGACATTCTTTTATAAGTCTATTTTCTACTCAGTTTCAG

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FIGURE 461

ATGCAGTTGTTAAGGTTACTGCCCTGCCATTAAATTATGAGGCTAAAGATGTTTGACG
CTGCACATGTGTATGGCTTCCTGATATGCTCTCGCAGTTCTTGGTGGCTTTGCAGA
GTTCGTTTGATAATGTTATCTTGGCATTCTAACAGTGATGTCAATACAAGGTTATGCAAAC
CTCCGTAATCAATGGAGCATAATAGGAGAATTAAATAATTGCCTCAGGAAGAACTTTACAG
TGGATCAAATACAATACCACATCAGATGCTGTCTCGCAGGTGCCATGCCTACAATGGCAAGC
GTCAAGCTGTCTACACTTCATCCCATTGTGAATCATCCACTTACGAAGATGCAGACTTGAGG
GCTCGGACAAAAATAGTTATTCTACATATAGTCGAAAATCTGCCAAGAAGTAGGAGAGAAA
TTGTTGGAGTTACATGTGAATTATTATGTTTAGAAGAGGCATGGTGTGTTGAGAACTAAG
CCTGGTTGCAGTATGCTTGAAATCTGTGATGTGGAAGACCCTCCAATGCAGCTAACCC

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FIGURE 462

GAAGTGGGCCAACATNTGACAAAACCTCCAATGAANGATTCCCCGCTTGAAACAATGGGGC
AGGGCTNCCGGCTTCGAGGGCAAGTTCAAGCATTCAACAAAGGTCCCCGGAAAATTGN
ANGGNGTCCAACACTCAGTGCCNCAGCCCAGCCNCAGAACCCAANACATAAGGCATGTCATC
CACAAAGCTCTCCTTGGGGACAACGCTACAGGTCCAGAACATCCNCGGAGCTTCATGCTCT
CGGGGGAGCAGACAGACTCACCTCAACCCCTGGCCTCCCACGACNTACATCCTGAAGATTG
TGCCCCNCGGTTATGAGGACAAGAGTGGCAAGCAGCGGTACTCCTACCAGTANACGGTGGCCA
ACAAGGAATACGTCGCCTACAGCCACACGGGCCGCATCATCCCTGCAATCTGGTTCCGCTACG
ACCTCAGCCCCATCACGGTCAAGTACACAGAGAGACCTGCGGCCGC

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FIGURE 463

TATCAAGGGCGGGTTTGGATTAATGGGGGAAAAGGGGGAAAGGCCAGGATCCNAACT
GGNGAATTGGTGATTNTGGTCCCTTCCGCTTCCGGCGGAAGGGCTGCCAGGGTATA
TTTCCTTTTCCGATCCTGCAACAGCCTTTAAACTGTTAAATGAGAATGTCTTGGCTC
AGAGAGTACTACTCACCTGGCTTACACTACTCTNTGATCATGTTGGTGTGAAACTGG
ATGAGAAAGCACCTGGAACGGTTCTCATATTATTCCAGTCTGGATATTGATACTATCC
TTCTTGTCTGCTGATTGTGAAAATGGCTGGCGGTGTAAGTCTGGCTTGACCCTCGACATG
GATCACACAATATTAAAAAAAAAGCCTGGTACCTCATTGCAATGTTACTAAATTAGCCTTNT
GCCTCGCACTCTGTGCTAAACTGGAACAGTTACTACCATGAATCTATCCTATGTCTTCATT
CTTATGGGCCTTGCTGGCTGGAGCGGCCGC

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FIGURE 464

AAAAGGCCAATTAAAGCAAAATATAACAAAACGAGAAGTGGAGGATGACTGGGTNTNAGCA
TGCTGATTGACTCCCAGAACAAACCAAGTATTTGACCAAGCCCAGAGATTCAACCATCCCAC
GTGCAGATCACCACTTATAAAGGACATGTTACCATAGGAATGCTGTCCTGCCTGTGGCT
GGCTATGTACAGCCATAGGATTGCCTACAATGTTGGTTATATTATTGTGGTGTACTTCTGG
GACCTTCAGGACTAAATAGTATTAAGTCTATTGTGCAAGTGGAGACATTAGGAGAATTGGGG
TGTTTTTACTCTTTCTTGTGGCTTAGAATTTCTCCAGAAAGCTAAGAAAGGTGTGGA
AGATTCCTTACAAGGGCCGTGTTACATGACACTGTTAATGATTGCATTGGCTTGCTGTGGG
GAGCGGCCGC

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FIGURE 465

CACTGGCCAAACCATTATATGGCATACTCTGGNTACGTGGCTGCCTGTTATTGGAAAGATAT
ATTAAGAATCCAGTTNTGGATTGCAGCTGTTATTTTTGGGAATGCTTGAAAAAGCAGTTT
TTATAGTGAATACCAAAACATCAGCAACACTGGACTGTCAACCCAAGGCTTATTGATATTGC
GGAGTTGATTCTGCGATTAAGAGGACGTTGGCTCGCCTCTCGTGATCATGAGCCTGG
CTATGGCATTGTGAAGCCTCGTTAGGAACAGTCATGCACCGGGTGATCGGACTGGGGCTTCT
ATACTTAATCTTGAGCTGTTGAAGGCGTGATGAGAGTCATTGGGGTTCTAACCATTTAGC
TGTTGTTCTGATGACATTATTTAGCAGTTATTGACTCCATTTGTGTGGTTCATTTTAT
TAGTTGGCACAAACTATGAAGACCTAAGGCTAACGAAAGAACACTGTGAAATTTCATTATA
TAGACATTTAAAAACTCTGATCTTGTGCTGGCTTCTATAGTGTATGGGTGGC
GGCCGC

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FIGURE 466

TGGATGGTACCTGGCCNTCCAGAGTCCCAGGGCAATGGGTCCATTTCAGCCCAATGTGGT
GTACATTACCCTACGCTCCAAGCGCAGCAAGCCGGCAATATCCGTGGCACCGTAAGCCCAAG
CGCAGGAAAAAGCATGCAGTGGCATCGGCTGCCCCAGGGCAGGAGGCTTGGTCGGACCATCC
CTTCAGCCGCAGGAAGCGGAAGGGAAAGCTGATGCTGTAGCACCTGGGTACGCTCAGGGAGCA
AACCTGGTTAAGATTGGAGAGCGACCTGGAGGTTGGTGCGGGGTCCGGGAGTGCAGGCCGGG
GGCCCAGACTTCCTGCAGCCCAGCTCCAGGGAGAGCAACATTAGGATCTACAGCGAGAGCGCC
CCCTCCTGGCTGAGCAAAGATGACATCCGAAGAATGCGACTCTGGCGGACAGCGCAGTGGCA
GGGCTCCGGCCTGTGTCTCTAGGAGCGGAGCCCCGTTGCTGGTGCTGGAGGGGGTGCAGGCCGC

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FIGURE 467

AACCTGTGACGTTAGTGTGTTACTAGCTTAATTGTATGTAGCAATGAATTGTGAATCT
TAGTGCAGTGGGTTTTTAAAAACTCAAAAGCTGGGAATTAAGGGTTCAGTAATAATGC
TATACCGAGGTGCTTGCATTGTATTCATAATTTGTTACAAACCAAATTATTTAATGAG
AACAGTCTGGGTTCAGAGGTGTGATGCCAGAATGTATTCGTACTGTTAGGCCCTGGAAC
AGATACCGGTGCTTCTGAAAGATGAAAGAAATGCAATGGGTGCTTCATGCAAGGTTGCAA
ACCTACCAAGAATGCATAATAGTCTCACTTCCCCAATAAGAGATGCGTGTGACTAGTTT
GGACTTTAACCTTAATGGGGATGGCGGCCGC

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FIGURE 468

ATGGTCCTGGGCATCCATTGACCTGCTTCTGTCCCTGTAGATTAGTTGCCTGTTCTAGAA
TTTTATGTATGTAAGGAATGATGACTATGTATGTTGTGTTGGCTTATTTTACCAAGCAAG
TTTTGAGGTTCATGTTATTGTGTATCAGAAGTTAGTTCTATTTATTGCTCAGTAGTATT
TCATTCTGTGAATTAACCATGGCTGTTAACATATTCATCTATTGATGATGAACATTTAGAT
TACCTTCGTTTGCCATTAAAAAAGTTAGTATGAATATGCATGTACAAGTTGATTG
TGGATATACTTGATGATAAACTAGAACCAAGGAGTGGTCAAAATTAAATTACACATCTAC
TCCCTGTGTTATTTGCC

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FIGURE 469

TGGCTGAAAATTTGGAAAAAGAATATTTCTTTAATAGGTAACCTAACATATTATT
CATTGTCGCCAGTGTAAACAAGAGGAATCAGTTAAACTCCTGTGTCAGGCCAGTACCNCCAA
TTAATGCACCTGTAGCTACTGAATTCCAGCCAAGATAAAATATAATTAAATCTAGTGCTTCAGG
AAATGAGTTGATCATCAAGGGAGTTAGAATGGAAAAACATTATGNATAATTTAAAGGACAT
TGGACTTAACGTGGATGAATGAGCTGATTTCTATACATATTAAAGTTAACATATAA
AAAAAGGCTTGGGTAGACTCCGTATGACCTTATGTATTTGATTCATGAGTTCAATTCTG
CAGTAACTTATCATTCTCATCTTAGGCTGGAATGTAGTGGAAAAAGAACTGAAC
AGGAGTTAGAAGATTTAAGTTGGCTGGCTCCATCACATACTGGCAGTGATGATCTTAGC
CAAGTTGAACGTGCTATGGCGGGTCTTGTATTCACTTCAAC

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FIGURE 470

AGTTACCCTCACTTACCAAGGACTTGCTCGCGTTATTAGTGCTGTTGGGTAGCATTCC
CATTGCTCACAAAGCTCTGTGTGCATAAGGACTTCAAGCAGCATGGTGCCAAGGAAAATTAA
TTGCTTTTACCTTGGGGATGTTATTCTTATCTTATGCATTGACCTCATCTGGCAGT
ATTGAGATGTTACCCCTATCCTCGGGAGAAGTGGTCTGAAATCCCACCTGATGTTGTGCT
GGCATCCATTGGCTGGCTGTACAATGATTCTCTCGCCTATTTATTAACCTCATCTACCT
TGCCAAGAGCACAAAAAACATGCTAACTTAACTTGGTATGTGCAATTACATTCCCT
TGTTGCAGTGGAACATTTCCATATAGCTCCAATCCTGCTAATCGAAGCAAAGAGAGT
GTTCTTCAGCATATGACTAGAACATTCCATGACTTGAAGGAAATGCAGTTAACACGGGACTC
TGGAATATGGATCAATGGGTTGATTACTGGAATTCTCACATAAC

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FIGURE 471

GAGGCATTGTGAATGGTTGCAGTGNAGCTTAGGTATAACATCATCAAGTGTGTTCACACCGGG
GGTCGGGTTAATGGAGTGTCCACGCCGAGATAACTGCGATATTGGAACACCTGTGAGAGAGA
TTGTTCTATAGGTGGAATATTCAAGAGTTACATTCTTGAAGTTCTGTTTACTGCATCA
AACACCCCTCTGTTCTCCATCATCTTAATAGCAACTGGAGACCCTTGGTCATTGGTA
AGGGGGTGCATTCTCCTCACAAAGGGTTTATGGACTTCCTCAGGCCGAGAGCTCTGAGAA
CACAGGCAGGATGGAAAAAGACTACTAGCCACTTTGCTTCCAACCCCCCTTAATGCCATC
CTTCATTGTCTTCTGGCTCTTCTGGCACAGTACCACTTGAGGCTGTGCCAGTG
TGGAGCAAACATTGCCTGTCCATTCTGATATACTTCAGAATTTGAGAGCAGAAGTTAATGT
GGAACAAAAGTTTCAACCATCTCAAGCCCCAAGGACTGGAGCC

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FIGURE 472

ATTAAGGCTTTGGGAGCATTCCCATTGCTCACAAAAGCTTGTNGCATAAGGACTTCAAGC
AGCATGGGCCAAGAAAATTATTGCTTTNCCTTGATGTTATTCCCTATCTTAT
GCATTGTACCTCATCTGGCAGATTGAGATGTTACCCCTATCCTCGGGAGAAGTGGTTCTG
AAATCCCACCTGATGTTGTGCTGGCATCCATTGGCTGGCTGACAATGATTCTCGTCCTA
TTTATTAACTTCATCTACCTTGCAAGAGCACAAAAAAACCATGCTAACTTAACCTGGT
ATGTGCAATTACATTCCCTGTTGCAGTGGAACATTTTCATAGCTCCAATCCTGC
TAATCCGAAGCCAAAGAGAGTGTNTTCAGCATATGACTAGAACATTCCATGACTGGAGG
AAATGCAGTAAACGGGACTCTGGAATATGGATCAATGGTTGATTATACTGGAATTCTCA
CATAAC

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FIGURE 473

GATTGCAAGGAGGATTTATATGATAGTCATAGCTTGTCTTAAAAGTTGGTATGTGATAAT
ATCAGANCAGTAAAAGGCTATTCACATTTAAAACAAATCTTATTAAATAATTATTCAC
AAGTTAGTAATTATTGATATTCTTCTTCAGGGACTAGAGTCCTATGCTCCTAAACTGACTT
TTAAGGAAAGATGAGACTATTCAGTGCAGTTAACATATGACATATTTATTATCTCTTATT
TTTAAATTGATATTATGAAGGAGTCTATGGACTATAATACGAAAATTCTGGTTGGGAGG
CAGGAAACCTGGCTTCAAGTACACTCCAATAGCTTTATATAAAATTCAGGTGTTCTTTTC
TCTAATACTTGAAATAGCTATTTCATGTCATTTCTGTACTTTCTGATACTTTT
AACATTGTTTATTTCAAATGAACAGCC

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FIGURE 474

TTCCCGCAATTTCAGAAAAATGGGANTAAAAGAAACTATTTGTAAAATAAAAAGCTTCCA
TTTTAATGACCANCATGTATTAAGATGGAACNTACTNTACGAAANCGAAGTTNTATGGTNTC
GAAAAGCCCGTGCCTGTTAAAACTTGATCCTAACTAAAAACAGACTTGAGTGGATATNAGAA
TGTTGGTTAGTGGCAGAAGAGTCAAAAAATGGCAGTTAATTATTCAAGTTATTGCTACTGTT
TTTAGCGAGCCTCATGTTTTGGAACCAATCGATAATCACATTGTGAGCCATATGAAGT
CATATTCTTACAGATAACCTCATAAAATAGCTATGACTTGTGAATGATAACCCTGTCTTTAAGCA

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FIGURE 475

TTTAGAAATGGTATGGCAGAATCCAGAAAATGCTTATTGAAGACAGTCATTGATCACCAAGTA
CACTTGATCTCCAGTACAGACATATGGTCCAACAGAACGCCTGGATAACAGGACTCAGACTCTTA
CTGGTTGGTATCATACGTGATCGTTGATTCAGTCATCTCTAAATTGCAGTTGCCGTGACT
GTGCTTTGACATCATGGACAGAGAAAAACACGTCGAAAAACAACTGCCACTTTATGTATA
CTCAACATTGTCTTCTCCATTGTGTTGGTCATCATAGTTTTCTACACTACTCTCTTCT
CCCTTAACCTCCCTCTTCACCCCTCCTGTGTTCTGGTGGGGTTCCCCGACCTATTAGAGT
TGGCCAGGAGCAGCAGGCACCACAGCCTGTGTGTGCAGATAACAGTGTACTACTACCAAATG
GTGCC

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FIGURE 476

GGGTGCTTTCAATTCAAGAACATCAACATTANTAAACNGTGGGTGGGATCCTTACAA
ATCATCCTGCTTTGNANATCACTGGCTACTAAGGCAGGTGCAGCATCAATGATTCACTAN
ATGGTTTGATATCAGCTCGCTGGTACTACTCACCTTGTTGATGGGTACTTGTGGAC
CCTCGTCAATCTTTNGAAGCCATTCAAGTCCTCAATCTCCTTCCCTGGTANCCGTTGG
TGTNTTATGTTCCCTTTGCTGTTCATCAAGATAGTAGAGCACATCTCTCACAGACT
ACAAATATGTGGTTCAAGCAGGAGCAGTAGAGGAAAGTGCCTCGACTGTGGAGGCTTGGCCA
AATCCAAAGACTTCTCCTTGGAGTCGCTAAAAGAACAGTTAATAATGCCACAC
CCATCCCCAC

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FIGURE 477

GGCCACNCTGGCAAATAAGGGCAAAAGCTTATTTTTGAACAGGAAAACATGTTTTA
AATTCACATGTTGTATGAGACTTTGCGAAGCAAGGCATGAAC TGCTAGGTATTATTAAGA
ATGAATGATTTGCATTAAGTTGTTGAAGGCATGTATTTGAAAAATATCTGTTACAAAT
TTATAATTCAAGACAAATTGAATCTTATTTATAATACTTTGGAATTTCATTAATAAGGCT
AAAATTGAGGAATATAACTAATTCAGCCTTAAGACATTAAAGTTGGAAGTCCTGCTAT
TCAACAGAATAACAAGAAAACTCAGAATGTATCACTCTGAAAAGAAGATATTAATAAGC
CCTTTATTATGGTTATAGTTTATTTAGTCTCAAAATTCTAAAGCAATGCTACAAACCA
TTGAATTGCCATATTTGTATCAGTGCTGTTAATTGCTGTCCTCAAGAAAAAGTGCTTT
TTCTCCATGGATGAGGC GGCGC

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FIGURE 478

CACACACACACACACAGAAATTTGAGAGCCATTAAATATAATTGCCTCCCTAGAACAT
ACCTTTAGGGNATTTTATCACTAAACCACATGTTATTAAATACGGTACATGTTAACATA
AATACATACATAAAATTCACATGCATACTAACACTTATGTTAAATATATTCAATGTATATAC
ATATGTACACAATATATGCATATACATGTGGGTATGTGGTATGTGTGCATGTGTGTATG
GCCAGCTACATAATTGTGGGACTAAGGGCAAAATGAAACTGTACGGCCCTCGTTCAAAAATT
AGGTGTGGAGCGGCCGC

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FIGURE 479

ACCAATCAGATGTATTAGGGATTTGGGATATTCTACCAGGTGTTGAAATGTCAAATGGAA
CAAGCGTTCATCTTGATTTGGAAGTGAATTGGAACCAAGAAAAGAAATAGTGCCTATTGAT
AAGCCAAGTAGAGGAAGTACTGTACAAAAATTAAAGAAATGGCTATAGTCCTTAAGGCA
AAATTGGGTGACCAAGGAAACCTCTGAAGTGGTTAATCTCATCTTGACGGTGGCTGATGGA
GACAAAGATGCCAGGTTCTGGGAGAACGAAAGTCGGCATGGCACCTCTCAACTGAAT
GAATTCTCTCATGGTGAACCTCAAGATAAAGAACATACCCCCAAATTAAATGGGATTCTGT
GGTGACCTCTATGTGATGGAAAGTGGTAATACCTCTCTTATGGAATAAGCCTCCCTGG
GTCATTGAACCTTTATTCCATCTGGGTTCAGAAGAACATGGATCAGCTGTTCACACCATCA
TGGCCAAGAAAGGCCAAATAGCCATAGGACTCTAGAATTGTGGAAGATGTTCCATGGCCC

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FIGURE 480

CCCGCCATGACTCGGAGACTGAGGACATGTATGGGACGACNTGCTACATGGCCCAGAGTGCCG
GTCATCTGTCACCAGTGACAGTGAGGGGCCATGTGAATAACCTTCACTCAGGGCAAACGT
GCCCAAAGAGGATTTTCAGCAGAATCATTATTCTGGCTTCAGAATTCAAGTCCTTCCT
CTGATCGAGTTAGGCAATAATCTGGAGGGAAATGAGTGCAAAAAGATGGATATGTCTGTGTT
GGAAATAAGTGGCATCATCATGAGCAGGGTCAATACTACCTATCAGCAAGGAGTAGGTTATCAGAT
GCTGGGAAATGTTGTCACTATTGGATTAGCATTTCATTACATCGACTTTCCGTGA
GAAGAGCCTTGACCAACTAAAGTCCATTCACTGAGGAGATCTGACTCTCTTGTGGGC
ACCACCTGTTACACCTATTATTGTTGTCGATAATTAATTTTTGAAAGATTGTGTCTTAC
TTGGATGTTTTTCATGATGTGTGGCGGCCGC

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FIGURE 481

GGCCACACTGCCAAAGAGCATATTGATCACTTGATTCTGTTCTTCTCCGGGTG
TGTGTGGCGGCCGC

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FIGURE 482

AAAGACCCAGTCATGGCAAGCCTCCAAGCATCAGTTCACCATGGGAAAGCATGTGTTCAAAG
CCATTCTGATGGTCCTAAGTGGCCCTTATCCTCCTCCACTCAGCATTGCCAGTCCCCTCGA
GACTTGCACCACCAGGCCAACAGAAGAGAGAAGCCCCAGTTGATGTTGACCCAGATAAGGT
CGATCTGTGCGAGGGACACTGGATGCCTGGATTGGGCCAGAGACCATGCACCTGGTGTAGAG
TCTTCGTCCCAAGTGGTGTGGCCATCTCATCAGCCATTCTGTGGCCTTCTTGCTCTGTCT
GGGATCGCCGCACAGCTGCTGAATGCCTGGACTAGCTGGTATTACCTGCCAGGGCCTG
AAGCTCAGCCCTGGCCAGGTCCAGACCTCCTGCTGTGGGAGCAGGGCCCTGGTGTCTAC
TGGCTGCTGTCTCTGCTCCTCGGCTTGGTCTTGGCCTTGCTGGGCGGATCCTGTGGGCCTG
AAGCTTGTCATCTTCCTGGCCGGCTCGTGGCCCTGATGAGGTGGTAGCGGCCGC

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FIGURE 483

CAAAACGATTTATTGCCAAACCCCTGTGCACTCCGATTGGCATCGAGGACAGTGGTCCTTATC
AGGCCAACCAATGCCATCCTGAAAAGGTGTTCATATCTATTACCAAGTATCCTGATAAGA
AAAGGTGNAGGGCCTGTCAAAGCAGCTGGATTGGAATGTCCGAAAAATCCAATGCTGGTTNGC
CATCGGAGGAATCAGGACAAGCCCCAACGCTTANTAAATTCTGTGAAAGCATGTGGAGATTC
ACATTTATTATGTATATTCTGCTATGGAATTAGATTCTCTGGTCGTACCTGGTTCTGG
GACATCCGACAGTGCTGGCATAACTATCCATTCAGCCTCTTCAAGTGGCTTATCACTAT
TATATCATGGAATTGGCCTCTATTGGTCCCTATGTTTCTCAGTTACAGACATTAAAAGA
AAGGACTTCCTGATCATGTTGTGCATCATTGGTCACCATTGGGCTTATCTCCTCTCCTAC
ATCAACAATATGGTCGAGTGGAACTCTGATCATGTGTCTACATGATGTCTCAGACTTCTG
CTGGGGCGGCCGC

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FIGURE 484

TCTAGGTCCATTGTCACCTTTCTGGCACGACAGCCTCCGCCCAACCGCATTCCCCAGGCCAA
GCTGGTGGCCATGCTTCAGACACGAGACCCACCAAGGGCCTCCGCCAGACCACGGTGCCTGCC
AAGGGCCACCCCTGAGCGCCGGCTGCTGTCAGTGGGGATGGGACCCGTGTTGGGATGGGAGCC
CGAACCCCCCAGGCCTGGGCGGGCCTCAGGGACCAGCAAATGGCCCCATCCGCTGCTCCTCAG
GCCCCAGAACGCCTTCACACTCAAGGAGAAGGGCACCTGCTGCGGCTGCCTGCGCATTCAAGG
AAAGCAGCTCCCAGAACTCGAGCCTGTGGCCTAGCGGCCGC

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FIGURE 485

CTGGCCAAACATATGGGGATGAAAATAAANAATTACATATGAAGATTCAAAACCATCCNCA
GGAATGAATTACACGCCCTCCCAGGCATCAANAAGCNCAGGAGGAGNCAGTTATGAAGTCAA
GGTATAGATGCAAAATGAACCAACAAAGGAAGTTTTTGAAAAGCAGTAAAAAAAGCT
NCAAGAACACCCAANTGAAGCAAATCACGTACAAAGANTGAGACAAATGCTGGCTGCCCTC
CACATGGTTACTGGACAGGGTCATAACAAATGTTACCATCATTGTTCTGTGGCTGTAG
TTTGGTCAATTACTGGCAGTGAATGTCTTCTGGAGGAAACCTATTGGAATTATAATCCTAT
TCTATTGTGCCATCATTGGTGGTAAACTTTGGGGCTTATTAAGTTACCTACATTGCCTCCAC
TGCCTTCTCTTGGCATGCTGCTTGCAGGGTTCTCATCAGAAATATCCCAGTCATCAACG
ATAATGTGCAGATCAAGCACAAGTGGTCTCCTTTGAGAAGCATAGCCCTGTCTATCATTC
TGGCTCGTGCAGCCGC

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FIGURE 486

TGCATCGTGGGTATGTACAATGTTACGCATGTGAGTGTGTAAAGTGTGTATNAAGTG
TGTGTGTACATCTGTGCAGCTGGTCACCAGCATGTACCTTCACAAGTTAGATTTGCTGGCAT
ATCCACGAGCTGTCACCACTGTGCCNTGGCATTGAGCTTTGAGGCTTGTGTTGGCCTG
TCCCAGGGCTCTGCCATCGTCAGTATTGGCCCCACTCACAGATGTTCTTCCTGGGTTGGGCC
AGCTCCTTTGGACACTTGAGATCCACCTCGGGCCGTCGCGTTGCGATGCTGCTTTN
TGTGGCTCCTTCCGGCTACTGGGACTGTTCCCTCTGGCATTGCCTCGGCAGCACTCGAGG
AACTCAGCCTCCAGGGCCTCCTGTTGTCCTGAAAATGCAGTTTATTCATTATTTTATTT
ATTATTTTGGG

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FIGURE 487

CTCAAAATTAAAGTATCAAACAGGGGT CCTCAGAACTGTCTCA TTCCCTGCTCCCATCAA
TATTAAGCCTAAA ACTCAAGAATCATTCTTAGCAGTTTTCTCTTTCTTTCTTTCT
TTTTTTCTTTTGAGACGGAGTCTCACTCTGTCGCCAGGCTGGAGTGCAGTGGCGACAGA
GTGAGAC

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FIGURE 488

GTGTGTGAGTGTGTGTGTTAATGTACCTAATTCTGTAAAGGATTTAAGTGATTTTCA
AAGTGGACCCAATAAAATAAAACAATATGCGTGCATGTGTTTATAAAAGTAATAAAACNAG
TTATTCTGCTTTCTAGTCTTAGTTACTTACATATTATTTGGGGGTGTGATGTTCT
TTTAAAAGGAACTCCTGTGACACCTGTTACTCCGGC

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FIGURE 489

GCAGCTGCCTATTGCACTTGTAAAAAGTTGTATGTTAACACTGCTGGGNTGGCTCANAG
TTGGGAGTGAATCCTCCAAGGGATAAGCTGGAGAACTTTTGAAACAGTCAATCTGTAAGGT
GTTTGCATCCCAAGGNCAATGGACTAGATTATGAAGGCTCTCGGGTGGACCCACTGTTCTC
TCTGTTATTAAGCTTTGAAGGAGAGAGATGAGGGCAGGACATGTGACAACGGTGCTTTC
CTTATGCNTATATCGCTCTCCAACAGCATCCTTCAAATNTATAGCGCTCAAAGATTCCAG
GACAGATCGGAAGAGGCCAGTGTCCATAGAAACCTGGGTTGTTCAGAAGAACGGTGTCTCT
GTGTTGTGACGGTGCCTGT

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FIGURE 490

GGTTTGTCTCGGTATGACAACATACAAAAAGCAAGCCAGTGGGGATTNTGTGGGCCNN
TGGACCTGCCAACATCTCCGGNGCATGCACAAAGGTCTCCTACTTCAC TG CACCCTCATC
GGATACTTTGTAGGCCTGCTCACTGCTACTGTGGCGTCTCGCATTCA CCGGGCCGCCAGCCC
GCCCTCTCTATTGGTGCCATTTACTTATTGCCACTCCTCACGATGGCTATTAAAGGGC
GACCTCCGGCGGATGTGGTCTGAGCCTTCCACTCCAAGTCCAGCAGCTCCGATTCTGGAA
GTATGATGGATCACGTGGAAAGTGACCAGATGGCCGTCA TAGTCCTTTCTCTCAACTCATGG
TTTGTTCCTCTTAGAGCTGGCCTGGTACTCAGAAATGTACCTGTGTTAAGGAAGTGGCTGGAGCCCTGTTGG
TGACTGGATTGGCATTGAAAGGGAGCTCGTTGCAGGAGAGAGGTGCTGGAGCCCTGTTGG
TTCCTCTCTCGGGATGTAGAGGTGGGCCCTCCAAGAGGGACAGGCCTCTCCCCAGC

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FIGURE 491

AAGACTCCCAAGGAAGTTGTTGAACATATTGGANAAACANGCCACTGAATATTATCATTTC
TCCTTTAAANAGAGTTTGTAAGGGGGNAAACATGCATTTTATCCAGACAATTATCCAAA
GCATTCAGAACATGAAGTGCTGATGAGGGCACCTCTGTGNTGAGTCCNTAAGCTATCAAG
TGTTCTTCTCAAGGACACATTGGAAGGTTAACATTGAAANTGAGCGGAGGACTTGGGGC
AGAGCAGCACAAAGAAACAGCCTTACACTGGGCACATGGAGGAGACGTCCACCCCTGCAGCCAG
GATTGGGGTTCACGTCACTGCCAGAGCTACACTCGCCTCTGCTTCCACGGTCCTGTTAATTC
TAGATCAGAGAGCAAGAAAAAGTACAGAACATATCCTCTACGGTTATTCCTGCTTTCTAAT
TAAAAAAATAATAACCATGGCAAGAGAGAAAGAGAAAGTACTCAGAGGCTGACACTGAC
ATTCACCTCCTCGCTCTCCTAAGTTAACACAGCACGTGCAGC

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FIGURE 492

TGCAGCATTGGCAGCAACAAAAATTCTAGTTGGNTGATGATTTGGAGAATTCA
GGCTTT
TGGGAATATTTGGTCTAGCACCTGTTGGGAGCAGGATGACTTG
CAGATTTATGGCTTT
CAGTAATAGCTTATTCATNTGAGCAAAAGCCGGATGACA
AAATATGATGCCCTAAAGAGGA
AGCCAGTCCTGTTCTAACCAGCAACGTGGCAGCACAGTGA
AGGGTGGACAAA
ACTCGAC
TGCTGCGTCTACCAAGTACGATGTCTCAGACA
ACTTCT
CTGGAAGGGTCTGGACTAGGTGT
TGAAGACCTGAAAGATAACACTCCTTCAGGAAA
AGTGA
TGTGATGATGATTTGCTGACTTCCACTC
CAGTAAATT
TTCTTCCATAAA
ACTCGGACA
AAATCC
CTGGAGAGAA
AGCAGTGGCTTCAGACA
CACCAAAGAAGACTCTGCATCAGTGA
AGTCCTAGATCT
CCCTCCATTGGTGGCAGCAGTGT
TGGCAAGGAGGACTCTGAAGATGCACTCT
GTT
CAGTTGACATGAAATTGGCTGATGT
GGG
AGGAGCGGCCGC

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FIGURE 493

GCCCTATCCAGGTTACCCCTCCNAAGGGAAACCAGGTTCTTAAAAAATTAAGCAGCCCCGG
GCCGGTGGGCTCACGCTTGTAAATCCNAGCCTTGAGGCCGAGGCAGCGGATCACCTAGAAGA
TGAATCAAGACCGGCCTCTGCTTGCCTGCAGGAGGCAGTAAAGAAGTGCTTCCCCGTGGTGG
GANCAGCAGGGCCTGTGCAGAGTGCCCTGCAGGGACTGCCAGCCCCTCCTGTCCCTCCCTCAGCA
ACCTGGCGAACAGCTGCAGGCCGCACAGAACCTGCAGGTTGAGGATGTGCCGGCGCTCGGG
CCTTCCCAGATTAAAAGAGCGGNTGAGGCAGTCAGCAGCTGGTGGCTGGTACATCGTCCTGG
ACAAGCTAGGGAAAGGCTAGCCATCCTCCTCAAGGTGCGAGACATGGTCAGCAGCCATGTGG
AGCGAGTGTTCAGATCTATGAGCAACACGCAGACACAGTTGGCATTGATGCTGTCCCTGCAGC
CTTCAGCAGTGAGCCCTCTGTGGCTGACATGTTGAATGGTGCTGGATATTGAGAGACGGG
CGGCCGC

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FIGURE 494

CAGCATGAGACATCCCCCATGCCCTGGGCCATTNAGATNTTTGGAGCACCAAGTCACTCCC
AGGTTTTATTTAGGGGTATCGATTTACCTACTTGTCAACTGGTANAAGTTGCTTG
ATATCANAAAAACTCCATTTTCCACAAAAGGGATTACAGAAAACCTTTGTGAGTGAGT
GATTGGAACCTAGAGACTCCTGTTGCCAGAACACTGCCCTAGAACAGAACATGGACAATGCA
GGGAGGAGAATTCACACAAACAGCACCTGTTNTGAGGCCTGTGCCAGCCCACCAGGCCTGCTC
AAATGTGGTCTTACTCAAGTGCACAGAGGCACATGAGGTTNTGGTATAAACCCAGCGTCT
TACCGCTGTTAAAGTCCCATCCCCATGGCTTCACAATCAGTCCGTTTTGCTGTAC
TTGATAAAATGTTATTCTCATACAGGTCAAGTACATTACTCTATTACAGTGAGTACCCA
ATAACAACAAAAGCGCTTACAAATTGGGGGGGGCGGCCGC

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FIGURE 495

TTTTTAAAAAAATCTCAGTATAGTTCTGATTAAAATTCCTTCTGAGTCCTAAA
TGCTTAAATCTTCTTCCCATTCTTTACTTCTCCTATCCATAGTTACAAGTTCTTACGC
ATGACATATCTCTGGCTGATAAGTTAACTGCTTAAGCACCTGTTATGTTCATTTAAC
ATAGCCAGTTACTATTATGCTTGGATATACACAATGAGGGAGCGGCCGC

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FIGURE 496

TGTGGAAAAACAGTTATTGCANCGGTTGCTTANAAAAACATAAAATGCATCCATGGGGCTT
ATTATTCAGGAGAAATCTCANAGCNCTGGGAGTGCTTANAGNCAGGGNTGCTTGCATCC
TCTGTGGATGTGTGTGTGTGTGCCTAGGTGTGCGCACAGGTTGTGCCTGTGT
GTGCATGTGTGTGGGGTGTGTGCATGTGTATGCACGTACCCGTGTGTGCACAGGT
GTGTGTGTGTGTGTGTGCCTGTGTGGGGTGTGTGCATGTATGCACGTACCA
CGTGTGTGTATGTGGCGGCCGC

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FIGURE 497

CATTATAATTAACATAGTTACTATGCTGTATATTGATCACCCAGACCCATCTTATAACTGA
AAGTTTGATCCTTGATCAAATCCCCACATTTCCCAGCCACTGACAACCACCACTTAC
TCTGTTCTATGAGTCACTGCTTAGACTCCACATGTAAGTGAGATCATACAGTATTTTC
TTTCTGCAGGGCTTATTCACCTAACATAACATCCTCTAGGTCATCTATGTTCAGCGAAT
GGCAGAATTTCCTTAAAGGCTGAATAGTGTCCCTCAGGTATATACAGATAACAC
ATACATAAGGGAATATGTGTGTCTCGGGTACATGTACATAAGGGAATACTATTTTACTC
ATTCACTGTATGTGTACCAAGATAACATACATAAGGGAATATATGTATATGTGTCTGGTACATA
TACATGAAGGAAATGCTATTTTACTCATTCACTCTCAGGGACACTAGGTTGTTTCATA
TCTTGGCTATTATGAATAGTGCTGCAATAATGGGAGTGGCGGCCGC

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FIGURE 498

TTATTGGGAGATATCCATGTTTCATAAAATCAACAAGAGAATCCNTGATTGTTCAGAAGAA
AACAAATTNTGACCGNAGAATGCTGTTACNTGAACCCCTTATTCGAAGNATCATAAGATTCAC
AGGGGTGTTGCATTTGGACTTTGCTACTGACATTTGTAAACGCCGGACAAGTGGTCAC
TGGGCACCTAACGCCATACTCCTGACTGTGTGCAAGCCAAACTACACCAGTGCAGACTGCCA
AGCGCACCACCAGTTATAAACAAATGGAACATTGTACTGGGACCTGGAAGTGATAGAAAA
GGCTCGGAGATCCTTCCCTCCAAACACCGCTGCTCTGAGCATTACTCCGCCTTATATGCCAC
GATGTATATTACAAGCACAATCAAGACGAAGAGCAGTCGACTGGCCAAGCCGGTGTGCCT
CGGAACCTCTGCACAGCCTTCTGACAGGCCTCAACCGGGTCTTGAGTATCGGAACCACTG
CTCGGACGTGATTGCTGGTTCATCCTGGGCACTGCAGTGGCCCTGTTCTGGGAATGTGTGT
GGCGGCCGC

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FIGURE 499

AAAAAAAAAAAAAGCTAAAAACCTTGAECTAAATCTACCATGTTTCTCATATTATTA
AAATTCTAACGTGGGTTTTGTTGTTGTTCTGTTCTCCCTCTGCAGAGTTGT
TAGCGGTTCTCGAGATGCCACTCTTAGGTTGGATATTGAGACAGGCCAGTGTTACATGT
TTTGATGGGTCAATGTTGCAGCAGTCGCTGTGTTCAATATGATGGCAGGAGGGTTGTTAGTGG
AGCATATGATTTATGGTAAAGGTGTGGATCCAGAGACTGAAACCTGTCTACACACGTTGCA
GGGCAGGCAGGCCGC

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FIGURE 500

ATCAATGGCCACCCAGCAAGACCAAGTTACAAGGATCGTATNTGGTCCGAAGGGATGAAAGT
GGCCAAGGGTCTCCNTTNTCGGTGAACGTTCAGCTGNTGCAGGACCACGGGAAATTGCCAA
GAGTAAGCATCTCCAGGGGAGATGACCTAACGTTCAAAGAGAAACAGGCAGCAGGTCT
TAAGCAGTGAAGATGCGGACGAGATGTTGCATGTGGCTCCTGAGGCACAGCAGTGACTTCGT
CCCAGAGCCTGGCAGAGAGGT CGCAGGTGTGCCAGCTCCCTGCCAGTCAGGGCAGCCTGGG
TGTGTGTGCAAGCATGTGTGCACATATTGTGTGATGTGCGTGCTCCTGTATGTGTGTGCATAT
GTGTGTATGCCTTGCACAGGTGTGCACAGGTCTGAATGTGTATACTGTGGGGGGCGGCCGC

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FIGURE 501

GAATATCCTGCAGGTATCTCTCCGGCCCACNTCCTGCCTACTGAGCNTCAGCCCTGATTGT
CATCGTCGGTTCTCGTACCCCTCATCATATTAAAGCGGGAGCTGCACACGGCCCCACACAGCA
GTGGGCACCAAGTACCGGATGCCCTCCAGCCATTCCAGTTATGTGGTTCTCTCCGTCTAT
TCCTTCCTTTCTGTATTAAGAATGCACCAAACAAACAGCCAGGTTCTGGACTTGCTG
TGGAGGCACGTGCTCTCCCTGGACTCCTCGCTGTGGCCTCTAGTCTCCTACAGCAGGGTC
TACCTGCTGTACCACACCTGGAGCCAGGTGCTCTATGGAGGCATCGCTGGAGGCCTCATGGCC
ATCGCCTGGTCATCTCACCCAGGAGGTCTCACCCCGCTGTTCCCCAGGATAGCAGCCTGG
CCTGTCTCCGAGTTCTCCTAATCCGAGACACAAGCCTCATCCCCAACGTACTCTGGTTGAG
TACACGGTAACCCGGGCAGAAGCCAGGAACAGACAACGCAAGCTGGGCCAGCGGCCGC

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FIGURE 502

CCCTGCCCAAAGTTAAGTTCAAGTTCTTTCAGATAATGCCTGAAATTGCCAGAATAGTC
AGAGGATTAAGGTTAAAAATTNTTGACCACAAATGCACTAAAGTTAACGAGTTCTTCN
TTCATTAGCATGTGTTTACACTAACATTAAATAAGAAGCCATTAGTCTTGGCA
GTGTTTCTTAAGACTTCTGATGTTATCAAGTATTCAATTAAATATTAAATTATTAAATT
ACTGTTAGTTAAATATCATTAGGGTTCAATTGGCTTAAAATGGACTGAACGTGGC
ATCACGTATTTGTCTCATTCACTGATGAATAAAGCATAAAATCAGTTGTTAATGGATGCTCA
TACCACTGTTATTTCAAATATTAAACACACTTCAAATGGGGATTGCTTATAA
ATACAGTTTCTACTTACACATGAGGAAAATAATTATTGCATTATGGATGTACACTTGA
AAAACTTTCAATGCAATTATCTGTATTTCACAATCTGGTACTTTCTCAGATTAAATT
TTGGTGGGGCGGCCGC

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FIGURE 503

AAGCCTGTCAAATGGATCAACCAATCCAGTACATTGCTCAAGATTCAAACACATTCAAGG
TGGGGGCTTGGGACGGGATCAGCATTCAATGGGAAGAAAACCACAGGCCATCAGTGGATC
ATACACAGTGCTCATCAAGAAAGATAACGTTACTTTAAATTGTGGGCTCAAACCTGGACAGCA
AGGTGCACAGTGGAAAGAGAGCAGAAGTGTAGGCATTGTCACATACACAGATTGTCTT
CAGAGCCAACGTGGTATCAGTTACATAGGAGATGTAGCAGTGGATGATATTCCCTCCAAGA
TTGCTCCCCTTGCTTAGCCCAGAGAGAAAGTGTACTGCTCATGAATTCATGTGTGCTAATAA
GCACTGCGTTGCCAAGACAAGCTGTGTGATTTGTGAATGATTGTGCTGATAATTCAAGATGA
GACTACTTCATTGCCG

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FIGURE 504

AAAAAAAAAAAAACCTGCCAATTTCAAACATAACCGTAGAGATTATTCAGGTG
CCATTTATAGTATAGCAGCAGGGCTTTACTCTGTGTATGCACAGATGCAGTCTGGGCATG
GTTGTGTGCTGGACTTCTCATGCCATCATCAGTATGCTTATGGATTTGATGACAGGCATA
GCCTGGGCATATCACCTCATTGGTAAAGG

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FIGURE 505

TTTAAGTGCAAAAATTATTTATTTTCCCAGTAATTAAATTGGAATTCCAGCCNTGG
CTTATTTTGGGAGACCCAGCCATNTACCAAAGCTGAAGGCACAAATGCTTATTCTCGTCACT
GTCCTTTTATGTCAGCATTCAAGAGTTACTGGCTGTCATTTTCAATGGGATGATTTATTGT
AGCTTCATAACCTGTTGGAAGAAGTTACTACTTGGACAGGCTATCAGGATAACTCCCTATA
TGAATGAAACTCTCTTATATTTCTTTCATCCCACCCAGTTACTGTGAGATCTAAAA
AAATATTCTTATCCAAGCTCATTGTCAGTACCTGGTACCTGGTACCTGGTACTACTTC
AGGTAATCATTGTTTACTTAAAGTTCAAGCTCAGATTCCAGCATATATTGAGATGAATATTCCCTGGT
TATACTTGTCAATAGTTCTCATTGCTACAGTGTATTGGTTAATTGTCACAAGCTTAATT
TAAAAGACATTGGATTACCTTGGATCCATTGTCAACTGGAAGTGCTGCTTCATTCC

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FIGURE 506

TTTTTTTTGACACGAGACATAAAAACCTTAATGAAGGAGGACACAGNTCAGAGCCTTCAC
AATGGGGCCAACCNTGCCAACCGGAGACCGGCCATGGCAACCGCTCAATCAGAAGGTGTTNTT
GATGCGGCCGGCCACCAAGCCTAAGGATGTCCCCGATCTTNTCTGCCAGTTGGCGATGTCTT
GGACACGGCGCACCAAGCTCCCCATGCCGAGGCTNTGCACACTCACAGCGCTTCCTCACCTC
CTCCTGNTGCTCCTCAGTGCCATGCTGCAGCTCAAACTTGTAGAAGAAGGCCAGGCATCCCC
CAGGTCCGAGTCATCTCACAGTGCGGTGGAACCACCTCCCTGGCCTGGTGATCTTCCGCTG
ACTCCAAAACAGCTTGGCCACGCCAGGAGCACATGGGGGTATGCTCACACTTCTTCAGGGC
ATCCACGCTCTGGTCCTCCTCTGGGCGCTCGAGGAAGA

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FIGURE 507

ACCCCTGTTTTAAGCACACCTCAAGCGGGCCTCGCTTACCAATANTGATTAACCACAAGN
AAAAGTGTCAAGCTCAAGACGTCCCTTACTGTTGAAAAACTGTCCTGAAAACATGAT
CGACGTTCCGGAATTAGAAGGACGTGGGCAATGAAATTATGTTCGGTCTCAGCTGAATGCC
AACATCAAACACTGTTGCCTTAGGAACCTCTAAATCCACTGGAGGGAGAAGAACTACAAAGA
AAACTGGCTGGGAAGATCAAAGGTACAATGATATAATTCAAGCAAGACTTGTTGATTCTTC
TACAATCTTACTCTGAAATTACTTATGCAGTTCAAGTTGGGCAAATACCTATTGTCCACATGCC
AAATTCTTATGACTGCTGATGACATATTACATGCCAAATCTGATTGAGTACCTT
CAAAGTTAGAACAAATTGGTGTCAAGACTTTGGATTGGTCGTGTTCATCGTGGTCCCC

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FIGURE 508

TCGACCCACGGGGTCCGGTAAAGTTGATGGTCTGCCTTGTACATCTCAACCATTCTGAACCA
CTTAATCCTNTTTGNCAACACTAGTAGAACAGAACCTGAAGATATGGAGACCTATAACCTA
GATGTTGCTGAAGCTTTNTGGATGTTGGTGAATATAATTCTGCACTCCCCCTCAGTGCT
CTTGTTGCTCTGAAAGATAAACCTTGCAGTAGTTGGCTTCGTATGCAGAATGTTAAA
GGCCTTAGGCTATATGGAGCGAGCTGCTGAAAGCTATGGCAAGGTGGTTGATCTGGCCCCACT
CCATTGGATGCAAGGATTCACCTNTACCCCTCAGCAGCAGCTGGGCCAGCCTGAGAAAGC
TCTGGAAGCTCTGGAACCAATGTATGATCCAGATACTTAGCACAGGATGCAAATGCTGCACA
GCAGGAACTGAAGTTATTGCTTCATCGTTCTACTCTGTTGTTTCACAAGGCAAAATGTATGG
TTATGTGGATACCTTACTTACTATGTTAGCCATGCTTTAAAGGTAGCAATGAATCGAGC

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FIGURE 509

ACAGTATGGTCATTGCTCAAAGAAAAGGAGATTGAGCTTAAATNAAATNTCTCACAAG
TTAGGTGATCCAGGTTTGTGGCTTGCAACCCTGTGGTCATTGNGCCCTGATATTAATC
TTCGGGGGGGTCCCTGCCATGGACAGACAAACATTNTTGTGACATAACAATCTGCTCTGTAAT
CGGGGCCTTCAGTCTCCTGTGAAGGGCNTGGCATTGCTATCAAGGAGCTGTTGCAGG
AAAGCCTGTGNTGCGGCATCCCNNTGGTGGATTCTGTTGNTGAGCCTCATCGTCTGTGAGC
ACACAGATTAATTACCTAAATAGGGCCCTGGATATATTCAACACTCCATTGTGACTCCAATA
TATTATGTATTCTTACAACATCAGTTAACCTGTCAGCTATTCTTTAAGGAGTGGCAA
GATATGCCTGTTGACGATGTCATTGGTACTTGAGTGGCTCTTACAATCATTGTGGGGATA
TTCTTGTGATGCCTTAAA

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FIGURE 510

TTGCTTGTAAAGCTAACAGGGGTGCAAGCTTCCATTTGGATCTANTTTAAATACACTCAGA
CAGGAGAAATTGGANTAATTCACAAACTACAGACACTTNTAATCATGATGCATTCAAAG
TGGACTCGAATTAAC TGAGTTGCAAAACATGACAGTGCCCCGAGGATGATAACATTAGCAATG
ACTCCAATGATTCACCGAAGTAGAAAATGGTCAGATAAAATAGCAAGTTATTTCTGATCGTG
AAAGTAGAAGAAGTCTCACAAACAGCCATTGGAAAAAAAGAAGTGTGATGAGTATATTCCAG
GTCCAACCTCCTTAGGCATGTCTGTTAACCTAACGCCATTATGGCAGTGGGATT
TGGGACTCGCCTTGCCCTGGCAAACACTGGAATCCTACTTTCTGGTACTTTGACTTCAG
TGACATTGCTGTCTATATATTCAATAAACCTCCTATTGATCTGTTCAAAAGAAACAGGCTGCA
TGGTGTATGAAAAGCTGGGGAAACAAGTCTTGGCACACAGGGAAGTCGTAATCTTGG

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FIGURE 511

AGTGGGCTTGAACCTCGTGAGTTCGCTTAAACTGCCCTGAAATGAAGTGGACTTGGAGGG
GCATGGAATATTACATGGNAGAGCCGCATGAGGCCGCCACCACGCTCNTGAAGGATGCC
GTGGGAAGAATTTGACGTGCCAGTGTCTCGTTCTACAGGGTGTTCATTCTCCGCAATCT
CAGAAAAATGGGACTAAAAGAAACTTATTTGTAAAATAAGAACACTCCATTTAATGACC
AACATGTATTAAGATGGACACCTACTCTACGAAACACGAAGTTCTATGGTCTCGAAGAACCC
GTGCCTGTTGAAACTGATCCTAACTAAAAACAGACTTGAGTGGATATGAGAATGTTGGTAG
TGGCAGAAGAGTCAAAAATGGCAGTTAATTATTCAAGTTATGGCTACTGTTTTAGCGAG
CCTCATGTTTTGGAACCAATCGATAATCACATTGTGAGCCATATGAAGTCATATTCTTA
CAGATACCTCATAAATAGCTATGACTTGTGAATGATAACCTGTCTCTAACGCA

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FIGURE 512

TCCGGAACAATTATAATAAGCCANCTTAACCCATTGAGAGCATAAGGATGNTGCAAAGGCN
CAGTGCTGGATGGANAGGACAGTGCCTGGGCAGTCATGGAAGACTNTTTAGGAGGTGACTT
TTAAGGGGTTTGTGATCAAAANTATGGAGTCTTAAGTCCAACCAGTGGTTATGAATTCCGG
TTCTGCCACTTGCTATAATAGCTGTATCACCATGAGCGATAACTAACCTCTTGTGCCTCAG
TTCTTCATATATAAAATGGGATCATGATAGCTCTGTCCCAGGGAGTTAGGAGGATTAAAT
GCAACAGTAATCCAACCCACAGTATGAAAAGACAGGGCTAGCACATACAACACAATCTATAAAT
GTTTGCTATTATTGTCATCCTTTATTAGTATATCATGGTACAAGTTGCTGGTAGAAAGA
TGGCGATGGGAAGGGGACATTCAAGCCAATGTGATAATAAAATCAACAGACAAAAGAAGGG
AGAGTGTGGTGAGTAGGATAAAGCTCTGTACAGATGCAAG

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FIGURE 513

ATTTAACCTTCCCCTTAAAAGGAATTGGCTATAGAACTGCTTGTAAGATGCTTCTTGATA
TTTACTTTGTTCCCTTCCCTAATCATTCCCTTTCCCCACTCCTCCAGAA

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FIGURE 514

TCCCGTGGGGACTTGGGATCCCAGACGTAAANTAGGAGCCGGAAAGAGGGAGGGNTTNTTC
TTGCCTGGAAGTTGCCTGNGTNTTGTACCACCCCAGCCCCCACCCTGGNGGGACCNTCGG
CAGTGACGGCCCACAGTGCCACGTGNTCCAGAACCCAGAGGGAAAGCATCACGGTTCNTNGT
TGACAGCTCCCAGTCACACAATCCCCACGTGTCCTGTCAATTCTAAACAAGGTTCATCACC
AGATTAGACCCACCTGCTTTCTCTTTCTGCTTCTTCCAGAGATTTTTAGTGTCTTC
ATTCACGTGGTACCACTCTATCATGTTCTGGCCCTTCTTATTCTCCTTAGCCTCATGT
TCTGTGGTATCCAGTTCTGACTTGACAGACATGAGCTTTCTCAGCTTCTCCTCATCTC
TCCAGTTGGTCTCTGGATTGTTAGATCTCAATGGCTTAGTCTGTCCAAAGTTAATC
TTCAGTTCATGGTGTGGCCAGTTGGCTTGAGCTCGGTGTGCAAGTCTCG

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FIGURE 515

TCAGCCTTCTATGGAAACAACTTGAGGATGAGCCNCCTTATTAAAAAGTTAGGTATCAA
TTTGACCNCATCTGGAAAAACACTAACAGTATTACATCCGTTAAAAGTAGCAGATGGCAG
CATCATGAATGAAACTGATTGGCAGGTCCAATGGTTTTGCCTTGCTTGGANCCACATT
GCTACTGGCTGGCAAAATCCAGTTGGCTATGTATAACGGGATCAGTGCAATTGGATGTCTAGG
AATGTTTGTATTAAACTTAATGAGTATGACAGGTGTTCATTTGGTTGTGGCAAGTGT
CCTTGGATATTGTCTGCCATGGCGGCCGC

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FIGURE 516

TTCATGGGAGGACATGGAGATCATGGGAAGCATATCTATGACTATAACCTAAAGCTGAAGCCG
TGTGATGGCCCAGTCTGATTANTGAGCCAGCGCTGAACCCACTGGCCAACCGGCAACAGATC
ACGGAAATGTTTTGAGGCATCTGGGTGTTCCCTGCCTTCTATATGTCCATCCAGGCTGTGCTG
GCTCTCTTGCTGCTGGCTTCACTACTGGCCTTGTGCTGAATTCAAGGTGCTGGGGTTACCCAG
AGTGTGCCCATCTTGAGGGTTACTGTCTGCCTCATGGTGTGCAGCAACTGGATNTGGCAGGC
CTTGACCTCACCAACTACCTCATGGTGCTAATGAAGAACCATGGTATCATGTTGCTCAGTGCT
TCAGACAGAAAGATTGTTGAAGACATCAAGGAGAGCTTTGTTATGTGGC

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FIGURE 517

ATATGTGAAATATTGGCAGTCGAACATGAACACAACGGTCAAGATGTTCCAGGCACATAAGAGGC
GATTAGAGAGGCCAGGTTATACACAATATACCATTCTGTAGTCCCTATTGTATGGTTAA
ATTATTCTCTAAGTGTATTCTGGGTGCANAGANGCATGGGCTCTGTCAGTTCTGGGAAACTT
TNTGCACCCCTATAAACACAATATTTCTTGTTTCACACATTCAACCATTGCTGGCACCT
TTNTGAAGTAGTGTGTCGGTATCAGCCTTGCAATATGTTANAGATGTACTGTCTGCCGC
ATTTGCACGGTTCTCTTTCAATTATGATTAATAATGTGTATACGTTATTCCCTTTTAT
TATCTACTGTGTAAG

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FIGURE 518

CCCCCGCACCGATTTCAAAAAATAATTTCTAATTAAAGATATGTGTATATGTTAACATCTTTCAGAACATAAAATTGAATGAAAAGAGTAATTCAGAAACACATGCAATATAATTATGTGCATTTAAACACACAAAGCAGGACTACATGATGTTCATGTTGTGCGTGTGTATATATATATATTTAACACACAGACAGGCCGGCATGATGGCTCACGCCTGTAATCCCAG

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FIGURE 519

GACCACTGGCCCACCGCCAAGGATTGCCTAGATGATAATTACAAGNACCACNACTTAGAT
TTNCCTTATTGATGTTAAGATAACCAACCAAGTAAGTATTAAAATCAGCCAAACCTGGACAT
TNTGGGAATATATAATCATTGATAATGCATAAGAATAGGAAAAATTGAATGTGTTATGAC
TAAAGTTTATATTGTGGTAATGTTAAATGTATTATTAAATATGTTAAATTATTCATTT
TTTCCCCTTGAGAGGTAAAGCCTAATACTTCTCCCTTGAATATGGGCTAGACTTATGAGC
ACATTTCTAATGAACAGAGAAAGTGGATGTGGATGTGACAATGTGTATGTTGGAAGACTAGAC
AATATCAGAGATGAACATGATGGTGAAGAGAAAATAAAAGAAGAAAGCTAGTTAATAAAAGGCA
CCATTGTTCCCTCCTCTCCTCCACCTCTTAACTCTCTCCCTCTGATCAA
CAGCTCTAGAAAAGCCAGATGCTATGCGGTGCAGGACTTCAGGCAGCTTGCAGGGAGATAC
ATGTGGCAAGGAACTGAC

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FIGURE 520

TGGCTTGTAGCCCCATCCAAATAACAGCGGGGAGGAGCGGAGCCTGTGGTACGCAACCCATT
CCCCNNTGATGAGAGAAAACTTTATCCATGACCAGGATGACTACAAACCATCTGATGCCCT
GCTGGTACTGTGAACGGCAACCCCGTGGATTACCACACCACCCACCCAGCCTGCCCATGGA
GAACGGCCCTGGCAAAGCCGACCTNTACTCCACCCCTCAGTACCGGTGGGAGCCCTCTGATGA
ATCCTCAGAAAAGCGAGAGGAGGAAGAGGAAGAGAAGAAGAATTGAAGAAGAAAGGAGCCG
TGAGGAAAAAAGAAGTATCAAAGTTCATGCCATGGTCTCCGTATTCCAATTATTATGAAACA
AAGTTACATCTGTGCCCTCATAGCTATGATGGCCTGGAGCATCACCTATCACAGCTGGCTGAC
CTTCGTGCTGCTGATCTGGTCGTGCACTTTG

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FIGURE 521

GAATTTTCGAAAAGCTAATGCCCATTTGGATGTCATTACCATTCACCTTTAATATTN
GGGGCATTGGGATCAAATTATCCTGATGTTTCAACAAAGACTGAGANAAAATAAGGN
GCATTACTTTTGACATTNTCTTTAGACCTATTGTGAGGTGTTGCCNCATTAGAA
ATTNCCCCAAATGGTGAAAATTNTAAACAGNAGAAGGAAGAGACTCAAAGTTAGCATCACA
AAGAGAAACNCGATGCTGGAAAGGGAGATTGCATTCTCAATCCGGGATAATTGCAGCAG
AAGGCTTCAAGTACATGTCAGTGATTCAAGGTTCTCGGTTCTGTCACAAATTAAATTGG
CAGATGTATATCAGTCTCACTATACGAGAATGGCCTTGAATAGAGCATTGCTGATGACATT
TCCCTGTTATCAGTTACTTATGGGCCATTGCGCTGCAATATACTGGCCATCCAGATCAGCAAT
GATGATACTACCATTAAGCTACCGCCGATAGAATTCTCTGTGTCGTGATGTGGCGTTTTG
GAGGTTATCTCACGTGAGTGACTCTGGCATTGTCATTGCATCTGAAACTGAAGAG

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FIGURE 522

AAATGTTTACAAATCACAAGAAAGTTCAAAATTGGNNNTATTAGTTGAAAAATTGTT
TTCAGTTCACTTGTGATTCTTGTAACTGCNGANAGGATTCTTTANACTTCCAAG
GATCTTAAAGCTATCNTACCTAGGAATGAGAATTATGGTGTCCATGACAACTTGAATAAGT
ATTCCCTAAAGCTAAGAGGAAATTCTNNCAATAATGANTCGGGNCATGCTATTGGAAAG
TAAAAGCGGAAAAGCTTGACGACACTGAAAGGCTTGTGAGATGGAACAAGTCCTCTTCA
CTTAACAAGATGAGAAAGACAATAGGTGGTGTGGCTCTGGCGACAGCAAATCTGCGCAATT
GCAAGGGTTCGCTTGTAAAGTTAAAGCATGAAAGAAAAGCTCTTAGCACTGCTATTAAATT
CTAATGGCTGGATTTGCCCTCTTGTGGAGTACCATGGTAAAATATATCAAAACAGT
TACACCTGGGAACCTTCCTCATTGTATTCCTGGCTCCTGGACAACAACCACATGACCC

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FIGURE 523

CCTTATTGATGTTAAGAAACCAAANCAAGGTATGATTAAGGATTCAGCCAAACCTTGGACATT
CTGNGAATATATAAACATTTGATAATGCATAAGATAGGAAAATTGAAATGTGTTATGACT
AAAGTTTATATTGTGGTAATGTTAAATGTATTATTAATATGTTAAAATTATTCATT
TTTCCCCTTGAGAGGTAAAGCCTAATACTTCTCCCTGAATATGGGCTAGACTTATGAGCA
CATTTCTAATGAACAGAGAAAGTGGATGTGGATGTGACAATGTGTATGTTGAAAGACTAGACA
ATATCAGAGATGAACATGATGGTGAAGAAAATAAAAGAAGAAAGCTAGTTAATAAAAGGCAC
CATTGTTCCCTCCTCTCCCTCCACCTCTTAACCTCTCTCCCTCTGATCAAC
AGCTCTAGCAAAAGCCAGCTGCTATGCGGTGCGGACTTCAGGCAGCTTGCAAGGGAGATAC

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FIGURE 524

GAGGGTAGGATCCGCAAGCCCCTTCGCGAAGCCCGAGNGAGNCCCAGGCACAGGCAGGCAG
AGAATATGTATTCCCATCCTTGGCCCACAANATTATGGCAGAGATGGTGGATTCTTAT
TCTCTTCTTATAAAAGCAACCATTGTCTTAAGCATTATGCACCTCAGTGGATAAAGGATAT
CTCTAAGTTGCTATGCATTATATAATAGAAGAAATAGATGAAGACACATCAATGGAAGACTT
GCAGAAAATGATGGTGTGGCACTTATACAGATTATTAGTTGTTCTATGAGATAATTG
CATTGGGGAGCAGGTGGAGCTACCCCANGGAAGTTCTGCTGGGCTTCGAGTTGTGACATG
TGATACATCAGTGCTTATTGCACCAAGTCGGTTTAGTNATTCTCCTCAAATGTTAGCAT
TACAAC

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FIGURE 525

CAAGATAAAATATGGGGAAGATGTAGAAATGTGACAGTTGGCAAAACAAAGTTCTCCC
AAGATTTCAGCACGTTGCAGCGGAAATTCAAGGAAACCATCNCAGCACTCAGAGAGCAGATAA
ACAAGCTGGAGGCACGCCCTGAGGCAGGCAGGGTGTACAGATGTTAGAGGGGTTCCAAGGAAGG
CCGAGGAGCGCTGGATGAAAGAAGACTGCACTCACTGCATTGTGAGAGTGCCAGGTACCT
GTGTGGTGGAGATTGTCCCCGGCTCCCTGTCCAGTCCTGAATTGGTGAAGGAACCTGCT
GTCCAGTTGCAGAGACCGAGGAATGCCAAGTGATTCCCCAGAGAAGCGCTAATAAAAGTTT
GTGCTGTTGAGCCCCAAATGGAAATTCTCAGGAAGAGACATTTAGGACTTCAGAACTTTA
ACTTGTAGTCACATTGTTGATATGGAAACCCTGACTTAAGCAACTTAGTCATCTAATCTTA
CATATACTTACGATTTTATTTCATTCTA

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FIGURE 526

GAAGTGAGGAGAAAGTTATNTTTCATATAATTAAAGGTCGGTGTGAACCATTGCTT
CATGTCTTTCACTTTCAATTGTCTCATTTCCCTAAAATANAGGCACGTGTTATGTAT
TACAGAGATTAGGCCTTGTCAATTAGTCCTTGTGAACGAGATCACATAGATTATTGTT
TCTTTCTGGCTTTGAATTTCAGCCATCATTAAAAAAACTTCCCCATGGTTTGTCCA
GTTCTTTGTAACCTCTGTTCTCCATTCAATATTGGATGTTGGCTTGTCCCTTGCCT
GTTGGTATGCGATATGGATCCCCCTTAGTCCTTGTCTAGCATCAATATATTATTTTAT
ACTGTCTTCAGATTGATGATGATTCCAGAGTTCTGGGGCTTAATGCCTGTTGCCTTAC
AGACTCTCATCCGGG

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FIGURE 527

CTTGTGTTTCTTCCCTCCCTAAATTGAAGAACTATGGAGAAAATGGTACTTGATGACAGT
AGTGGTTTAATAGGACTAACAGTACGATGGCAGTGTCTCTTAATTCTTATTCAAGGTGCTGGT
AACCCGCCTATGTTGGTGATTATGAAGCTCAGAGACACTGGCAAGAAATAACTTTAATTAA
CCGGTCAAACAATGGTATTAAACAGCAGTGATAACAATTACAGTATTGGGGATTGGATTAC
CCACCTCTTACAGCTTACATAGTCTCCTATGTGCATATGTGGCAAAGTTATAATCCAGAC
TGGATTGCTCTCCATACATCACGTGGATATGAGAGTCAGGCACATAAGCTCTCATGCGTACA
ACAGTTTAATTGCTGATCTGCTGATTTACATACCTGCAGTGGTTTGTACTGTTGTTGCTTA
AAAGAAATCTCAACTAAGAAAAAGATTGCTAATGCATTATGCATCTGCTGTATCCAGG

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FIGURE 528

CCAGAATGAAAAAAAGTCTGGATAATAGTGTGACTAGCGTTAACGAACTTGAG
AGTAAAAGCACCAATAAGATTTTCACCTTCTGCTTCCACCCCCAACTGAGAACATCC
ACTCAATTGTTGGAAGAAACTGTAGGTCTATATAAATTTATTTATAATGTATGTGTAATAT
ACATAATCATAATACAGTTCTCAGATGCAGGGAAAGAAGTTGGCATTAAATCATTGAGGCTT
AGGTTTGATGTGATCAGACTGGGCATGTCAAACCCGAATTCACCAACAGTCACCTCA
CCCTCCTGGTACATTGCCATTCCAAGGAATTCTGAGAGTAGGCAAACAAATTTCACCTCATG
GTACAGTTCTCAGTTCTTATAGGAGAAATATGGTATATGTTATAAGAATCTTTATGAG
ATTATAGATTCAATGCTGGATAGTGTCTGCACCCAAACAAGAAAGTCCATAATGGAATG
ATCTTCCC

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FIGURE 529

TCCAAGTCCTGAACATCTTGGTTTTGGAGTGTCCAAACCCATGTTCAGAACGGCACA
TGGAATACTCATGTAATGNAGGAAAAGTCTATATCTGCAGCTGGACCCAGCCATACCAGGAGT
GATTTGGAAATCCATACCGTTGGGATTGATCCGATTGAACTTGGCTCAAACAAACTC
ACATTTNTGAACTCGTATAAAATGAAGATGTCGGTGATCCTGGAAATTGTCCAGATGGTTTT
GGTGTCACTCAGCCTTTCAATCACATATACTTCAGAAGAACTCTAACATCATTCTGCAA
TTTATCCCTGAGATGATTTTATCCTGTCTGTTGGATAACCTGGTTTCATGATCATTTC
AAATGGTGCTGCTTGACGTCCACGTATCTCAGCACGCCAGCATCCTCATCCACTTCATC
AACATGTTCTGTTAACTACAGTGACTCTTCCAACGC

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FIGURE 530

GCCTTAGTTCCAGCTACTTGGAAAGGTTAAGGTAAGGAAAAGGATCCCTTGGGCCGNAGGTTGA
GGCTNCAGNAGTTGAGATNCACCATTGCATTCCATTTGGGTGACACAAGCGAGAGCTATCT
CAAAACCAAAAGCAAGCAAANCCCACCCAGACCAAAAGGTGACTTCCAGGGCTGCCAG
CTAGGAACACTCCAGAAAGCAGACAAGGAAACCGAGTGTGAAGAGTCCCTTGAGATTGTC
ATGGCCATGTGACATTCTTGGCCTGAECTCAGTCACATGTCCCCTCGAGATGCAGGGGG
ACCTGGAAATGTAGTTCTGGCTGGCAGCTGCTTCCAGCAATAGCACTCTACTGCAGAAAG
AGGAGCAGGAGTCTGTGGTGCAAAGCCAGCCAGGCCTGCCACAGATACTGCACCATTACAAA
AATGCTTTACACTCATTCATTGCTTCTCATCACAAATCTATACCATCAGCTATACTGTCCT
CATTTTCA

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FIGURE 531

GAATGGAGGAAATTGCTTCACTTCAAGACTTCACTAAAGCTTTCACTAAAACCTNTAAAGGTGTA
CAAGGGAGGGAAGGGGGCAAAGCCTGAAACATTTCTTGCTGGCCATGTTATGATCA
TATACCTTTAAATAAGGGAAATAGTATCTTAAAGTTAATGTCTAGCCAAGAGTTAGTAA
ACGAAGAATTAAACTGCAGTGTGATCGGTGCTTGTGAAATACATCTTAACATTGGGTG
GAGAGGGGCCTTAAGAAGGACAGTCATTGTAGGAAAGCAATTCTGTACATGAGTTAACAT
TCTGTTGCATTGTCTGCAGATTCTATTGTTACAATATTAAAATGTATGTTAGCAAA
ATGGGTGGATTTCAAATAAAATGCAGCTCCACAAAAGTTGTTATGGTATTCTGGTCTGA
GATGCATTTCANTTTCCNTCTCTTTTATTATCAATANTGTCATTTCCCTAATAAAAT
ATACCCAGG

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FIGURE 532

GCTGTCCTGAGCAGTTGCAGAACATCGAGGGTGNAGAGGGCACATACTGTCCATGGAGTGG
TGGTCAAGGTGGACAGGGGGCGGGTGGTATGGCGCAGTTGACATTGAATACCAGCGCCTAG
AGGCCTCCTATAGTGATTCACCCCCAGGGGAGGAGGACCTGTTGGTGCACGTGCCGAGGGGA
GCAAGTCACCTGGCACCATATTGAAAACCTTGACCTCTTCTCTCGAGTTATAATCTGC
ACCAGAAGAATGGCTTCACATGTATGCTCATCGGGGAGATCTTGAGCTCATGCAGTTCTCT
TTGTGGTTGCCCTCACTACCTTCTGGTCAGCTGCGTGGACTATGACATCCTATTCGCCAACA
AGATGGTGAACCACAGTCTCACCCCTACTGAACCCGTCAAGGTCACTCTGCCAGACGCCTTT
TGCCTGCTCAAGTCTGTAGTGCCAGGATTCAAGGAAAATGGCTC

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FIGURE 533

GGGTAAGTATATTCACTGCAGGTAAAGACTGAATGAATGGGTACCATCAAATTGGTTAAATGA
AGATGGGTTTGGCTCAGGAACACAAAGTNTTATTTATCCTGTGCCAACACTCCAGTTTG
CAATGAGATTGTGAGGAAGGAGAAGGCAAGGATTCTGTTCAAATGTTGGTCCCAGAGGACCT
AGAATAGTACTTGACCGGGTAAGCGCTTAATAAAAATGCTTACTCTTATGAATTTAGCTG
CAGAAACATTTAGTCCCAGACAATATGTGAGAATGTAAAAATGCAAATCTTACTAAAAG
AATATACAGGAAAAGTTCTCCCTACTCCTCCTGAAAGGGAGCCAGTGTATTAGCTCGTCAT
GGAGATTGTCTGTGCTCATGCAAGCATCTCCCTGCATGTATGCTCTTGCTTCGTGCAAAG
AATAGCATCCTACACACACCTTTAGCCCCTTGCTTTGGTTGTATTTGCAGATTGG
GTCATTTGTGCACACAGTGCTATTTATTCTTTTTGTTGTTCCCCCTG

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FIGURE 534

ATCATAGTGTTCAAACTCCCCGTGAAAAGTTCCAAAATCCCATGTCACAGNTGAGTCTT
GGTTTGTTGATTGGTTGTCTCTGANAGTGTGTTATTTTGTTCAATTATGTGTCTCATA
ATTTTGTTGAAAGCTAACAGCCTTCTTNGAAGGCTAGTGGAGACTTGGTAAACACTATTT
ATGNGCAAAATGGACATGCCTTTNTTAAGGAGGGAGCATTGAGACAACCTGTCAGGTTT
TGTGTTAGTATGGTTACTCTCAAAAGNACATAATTCAAATTCTTCAGTATTATTTTG
CTTAGTGGCTGGTTGTTGGAGAGTTTCAGTGTCTGTTCAAATCACAGTTATTGGTCTT
TTCTTGTGCCTACGTNTAANAGAGGATATCTTCTGTGCTTTACCCTCACTCTCCAGCAG
TANACTGCTGTTACTTGTCC

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FIGURE 535

CTGCCCATTTTGTACCTGGCAAGTGTTAAAAAGGCCTAAAGAAAAGGGTTG
TGTTGCTAGTTAAGCTAGCTTGTATTGTGGNGGCTCCTCGTTNTGCTGGCTGCCATTCT
TTACAGAAAGGGACCAACCCCTGCAGGTTNTAAGAAGACTCTCCGGTTGATCGTGATTAT
TTGAGGATAAAAGTAGCCAATATTGGTGCAGCTTCATGTCTGAAGATTAAGGATATTT
TGCCACGTCACATCCAATTAATAATGAGCTTGTACGTTTGAGCCTGCTCCTGCAT
GCATAAAATTAATAACTTCAGCCCTTCCAAAGGATTCAAATTACACTGGTTAGCTGTGC
TATCATTCTTTATTTCTTCCAAGTACATGAAAAATCCATTCTGGTGTCACTACCAG
TCTGCTAGTTAAGTGAATTCTTTATGTCTACTGGTTTACTTGTGTCAACATT
GTATGCT

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FIGURE 536

GGTTTGTTCATCTGCCATTATAAGTTTGAGGCATCCCCAGCCATGCTGAAGTGG
AAGTGGCACTAACAGTCAAAGGAAGCTACATATGGGTGGTCCCTGTTACACCAGCCTCCAAAG
CCTCCCAGTGCACCTCTAGGAGACAAGCAAGGAAGGCCGCTGCTGTTGTCATCCTGCTCA
TGGCGGTGTACTGGTGCACGGAGGCCCTGCCGCTCTCAGTGACGGCGCTGCTGCCATCGTCC
TCTTCCCCTTCATGGGCATCTGCCCTCCAACAAGGTCTGCCCTCAGTACTTCCTCGACACCA
ACTTCCTCTCAGTGGGCTGATCATGCCAGGCCATTGAGGAGTGGAACCTGCACCGGC
GAATGCCCTCAAGATCCTGATGCTTGGAGTCCAGCCGCCAGGCTCATCCTGGGATGA
TGGTGACCACCTCGTTCTGTCCATGTGGCTGAGAACACCCCTCCACTGCCATGATGCTTC
CCATTGC

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FIGURE 537

TTGGCCTAATTAAAGTGATATAAAAATGAAATTTTATGCAGTGTGGNGAGGGGCAAAAA
AAAATANATTGAACACCCAGATTAGTTGGCTCTGTGNTGCAGCTAGTTACATGGCAT
CCAGGACNAAAGTTGGAAAACAAAATAATGGAACCTAAATAGTACTAACCAAAGTATAGGGTG
CTTATGATTACAGAACTCTCTTACAGGCAGTATGTTGTCAGGCCACTAGAACCCACGT
AATGGCAGAGGCTTCATGTTAAAAACCTTCCAAGGCTTCATTATTTCTTAT
CTGTGGTACCCCTAGCTCCTGTGCTTAGACACACTGGCCTACCTCAACTCCTGACCAG
TGTAGCTTACAGTGTAAAGCTTACCCCCACACCCCCACCTCCTGCAATAAAATAGTAGCATCGGC

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FIGURE 538

GGTAATGGCAATTAAAATTTCGGGCTGGATTAAAAATTATTAAGGNATTGAAG
TTCCTTTCTCCNTTAGGTTAACAGTGAATTACATGAGTAATTAAAGATATCAGATN
CATTTGCTATTCAAAGAAAATTATGATTAAAGCCACTTTAAATNCGAGAAGGAAAATA
GGATGGATTAAAGGGTTAACCTTAAAGATTATTGGTTAATGTTGACATATTCCTCTAT
CTCATAGATGGTAAAGTGTGCTTTAAAAGTGGCAAATGCACTCTCAGAAATCCTTTC
TATCTGATCCACATGGAGAGGTTAAAGGTTCAATTGACCTCTATGCAGGCAGCGCTCTC
ATTGGATGTAAGAATATTACCTGCAAGGATAGAATGCAGTTGTGCAACAGAGACACATTCTTA
TTTCACTTTTCACAATTGGTTTAATGACCCTTTATTGAATATTGG

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FIGURE 539

AAAGGGTCCGGTCCCCGGCGAAACCACTTGATCTTCNTCTTGGCTAAAAAATGTA
CAGGTTTCCAGGGCAGCCTTGGGATTGGGCCACTCCTTANGATCCTGGTTCTTCCCCTTG
TCTTNANACGGAGAAGTTGCAAATGGAGCAACAGCAGCAATTGCAGCAGCGGAGANACTTT
TAGGCCTAANACAGGGCTNTCAGGAGGAATGCCAGGGCTTACCCCTCACNTCCTGGAAANAT
NTANATTGTATTGCNGTTGAGCTGTCAGTGGATAAGTTGAAATTCAAGNGTTAAC
TGNTGAAAATTGGAATTTTTTTAACTTGGCAGCAANGGGTCG

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FIGURE 540

GGTTGCTTGGGGGTGTTTGAATATTTGTGACTGCGNCNTCNTAGGGTCAGTGGCATT
TTGNTTAGCTATAAATTATAAACAGATGGAACCTTACCACGCCCTGCCATTGGCTTTT
ACTTGGCAAGTGTAAAGGCCTCAAAGGAAAGGGTTGTGCTAGTTAAGCTAGC
TTGTATTGTTGTGGCTTCCTTCGTTCTGCTGGCTGCCATTCTTACAGAAAGGGAACAAAC
CCTGCAGGTCTAAGAAGACTCTCCGGTTGATCGTGGATTATTGAGGATAAAGTAGCCAA
TATTTGGTGCAGCTTCAATGTCNTNTGAAGATTAAGGATATTTGCCACGTCACATCCAATT
AATAATGAGCTTTGTTTACGTTTGAGCCTGCTCCTGCATGCATAAAATTAATACTTCA

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FIGURE 541

CCTTCCACTTATGTGGTCCCACACCACCCGCCTCCCCCTGCCAGGNTTATTNGNGTGTGTGT
GAGTGTGTTCTGTTTGTTGTTTGNTGTTGTTCAAGTGTGTTGGTTCTTTCT
TTCCCCCCTCCGGTCCCATACTTCACAGCACTCTGGTGCAGGAAGAAGCAGAAG

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FIGURE 542

TCTAGTTGCCATAAGTAGAATTACATGGGAATGCACTCTATTCTGGATATTATTGNTGGATT
CCTATATACCATTTAACCTTAGCTGTCTTCTATCCATTGTGGACCTGATTGACAACCTCAA
CCAAACTCACAAATATGCTCCATTCATCATCATCGGGCTTCATTTAGCTTGAGATCTTTC
TTTCACTCTGACACCTGGAGCACATCCCGAGGAGACACAGCCGAGATACTAGGAAGTGGTGC
TCCAATTGCATGTGGATCTCATGTTACTTATAACATGGGTCTAGTATTAGATCCTCTAGA
TAC

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FIGURE 543

AGAACCCCCCGGTGAAGTTCCGCCAATAACCTAACGGGGCTTTCCAGGACTCAACCCG
AGTAAATTCCCTCATCTATGCCTGTCTGCTGCTGTTCTGTGCTGCTGGCCCTCGTTGGA
TGGCATCATACAGTGGAGTTACTGGGCTGTCTTGCTCCAATATGGCTGTGGAAGTTAATGGT
CATTGTTGGAGCCTCAGTTGGAACTGGAGTCTGGCACGAAATCCTCAATATCGAGCAGAAGG
AGAAACGTGTGTGGAGTTAAAGCCATGTTGATTGCAGTGGCATCCACTGCTTTGAT
GTTGAAGTTCTGGTCTGTGACAGAATCGAGAGAGGAAGCCATTCTGGCTCCTGGTCTTCAT
GCCGCTGTTCTTGTTTC

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FIGURE 544

TTAATGTCTAACCCAAGAGTTAGTAAACAAAGAATTAAACTGCACTGTTGATCGGTGCTTG
TGTAAATACATCTTAACATTGGGTGGAGAGGGCCTTAAGAAGGACAGTCATTGTAGGAA
AGCAATTCTGTACATGAGTTAACATTGCATTGTCTCTGCAGATTCTATTTTGT
TACAATATTAAAATGTATGTTAGCAAAATGGGTGGATTTCAAATAAAATGCAGCTCCACAA
AAGTTTGTTATGGTATTCTGGTCTGAGATGCATTTCATTTCCCTTCTTTTATTATC
AATATTGTCATTTCCCTAATAAAATACCCAGG

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FIGURE 545

AGTTTCATATATTGGGAATGAGCCTTGAGCCATAAAAGGTTTCAGCAAGTTGTAAC TTATT
TTGGCCTAAAAATGAGGTTTTGGAAAGAAAAAATTTGTTCTTATGTATTGAAGAAGTG
ACTTTATATAATGATTTTAAATGCCCAAAGGACTAGTTGAAAGCTTCTTTAAAAAGAA
TTCCTCTAATATGACTTTATGTGAGAAGGGATAATACATGATCAAATAAACTCAGTTTTAT
GGTTACTGTAAAAAGACTGTGTAAGGCAGCTCAGCACCATGCTNTCGTAAAAGCAGCTTCA
ATTATCCNCTGGGTTATCTTTGACAACTTGCCATTATCTGATGTTACACAATTCAATAGCA
AGCAAGTTGAGACAATCGC

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FIGURE 546

CATAAAATATACCCACCCCAAATGGACGACTTATGAAGGAATTNCTTGTGAAAGCTCATTGGAG
TAAAATTCCTCTCAAACAATACTTTAGGTATANGCNTGAGTCTATTAATTATTTCTGT
TANACCCCTGCCAAAAAAGAATTAAAGTTAGTTATGTTTGTTGTGTAACCATGTTCTTCAGA
ATGCAGGTATGTGAGCATCATGGTTCTGGGTAAATTCTGCTGCTCCTGTCTTGAAAATGGAG
ATACCACTTGCAGCTTATCCCAGTGTGAGTATTCCAGCATGGTAGTGGTTCACTCCATTG
CATCCATCCAGAACCTTCACACAGGCCTCCCCGAACCCCTGCGGCGCAAGGGGTTCG

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FIGURE 547

AAAAAAAAAAATTAAGTGAACCTCTACTTAGAATGTTGGCTTTCATATATGTACAAAACA
AAAGAGGTTGCAGTGATGGCGTGGATAAAGGCACCTGTGTACTTTCCAACCTATCCAATTTC
AAGATGTATCCTTGTGGATTACATTGGTTCTTTCTATGGAATCATGCACCTTAGACCTGGG
AGAAACCAGCGTGACATCCAGGGTCAAGGTTCCAATCAGGTATTTGGGCAAGGGGTTCG

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FIGURE 548

AAAAAAAAAAAAAGCTAAAACCTTGACTAAATCTCCATGTTTCTCATATTATTA
AAAATTCTAACGNGGGTTTTGTGTTGTTCTGTTCTCCCTCTGCAGAGTTG
TTAGCGGTTCTCGAGATGCCACTCTTAGGGTTGGGATATTGAGACAGGCCAGTGTACATG
TTTGATGGTCATGTTGCAGCAGTCCGCTGTGTTCAATATGATGGCAGGAGGGTTAGTG
GAGCATATGATTTATGGTAAAGGTGTGGGATCCAGAGACTGAAACCTGTCTACACACGTG
AGGGGCATGCGGCCGC

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FIGURE 549

AAATTATCTTACTGATATGC GTGCCAATCCC ATGAGAAAAGACATCTCATTGAGGTTCC
CCTTCCTCTCATGTGGTTGATT TTTGGAAGGTGATA CAGATGTGGTAACCATGCAAATGTT
TATGAATAACTTACTGAAGTGATTCCATCCGTATTCTGTTCTAATACTGGAGAATGACCTT
CATATTTATATATTTATTCTTGTTCAACTATCCAG

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FIGURE 550

TGAAGATATGGGAGACCTATNCTTAGATGTTGCTGAAGCTTCTGATGTTGGAAATAATT
CTGCACTTCCCCTCCTCAGGGCTCTGTTGCTCTGAAAGATAACAACCTGCAGTAGTTTGG
CTTCGTCATGCAGAATGTTAAAGGCCTAGGCTATATGGAGCGAGCTGCTGAAAGCTATGGC
AAGGTGGTTGATCTGGCCCCACTCCATTGGATGCAAGGATTCACTTCTACCCTTCAGCAG
CAGCTGGGCCAGCCTGAGAAAGCTCTGGAAGCTCTGGAACCAATGTATGATCCAGATACTTA
GCACAGGATGCAAATGCTGCACAGCAGGAACCTGAAGTTATTGCTTCATCGTTCTACTCTGTTG
TTTCACAAGGCAAAATGTATGGTTATGTGGATACCTTACTTACTATGTTAGCCATGCTTTA
AAGGTAGCAATGAATCGAGC

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FIGURE 551

TGGACCCCAGTTGTCAGCTGGGNNGGTACTGGATCATCTTNTTCTATCACAAGATAAACTATC
AANTTCCCCAGCATCATGACCTTGTTGCCGTAAAAAGGAGTTCACTACTTCTGTTCACTTGA
GTCTCTTCAAATGGATTCTGTGTCCCTCTGGAGTCTGTGCTGCATTATTGCTTCTGACTC
TTCCACTAAGGCCAGAG

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FIGURE 552

CTAAAGGGAAAGAAGAAAAGAAGGATTGGTCTTGCTNTAAGGGGTAGAAAAGNGCAAGGGG
AANCAGGAAAGGAAGGCNCCTACGGNGTAATTATGAAAATGCATTGGAACCTCTGTCTGATG
TTTGCTTTTTTCATTTCTCAAAATATTCTANANANGTNTAACCTCTTCCACCAT
TTGCTTAGTTTAAGNGCCCTGTGTGATAGAAGGGTTCATGTTGTAAAATCAGTNNTGAATA
ATCAGAACACTCTACCAGATTGTCTAATGTTGATTGTTCTGGCACTGCTCTAAATGTCT
TCCTCCTCATTCTGCG

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FIGURE 553

TAAAAAGAAAAGCTAAAGTTTACTGTGGCCAAAAACCCCTACATGGTCTGGGACTGGNGGT
NTCTTGACCNTATCTTGACCACCTTCCTTTTCACTTCTCAAGGCACANCTGGCCTCC
TTTTGTTCTGGCANTGGGAAGACTTGTTCCTACTTCAGGGTCTCATGTTGTTCTCCNT
CTGCCTTGAACACCCACCTTCTCCAAGTGTTCAGGCAGATGGAGTATGCACATGGCTCAC
TCTTTACTTTAAGTCTTGCTCAAAGCAAATTNTCAGCCATGGCTTCTGAGCACCC
TATTAAAATTGCTTCCTACTCCTACATGGCTGTTCTCCTTGCTTACCCACAC

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FIGURE 554

TTAAAATAGTAAAAAAAAGAATTATTGGTCTTGTAGAATTCTCTGCAAAGAATG
TCCAAAATTCATATTCACATTGATCGTATGGCAAAAGATGTCCCAGAAGAACATA
TGAGAAGATGGCTGCATGAACGTTCGAAATCAAAGATAAGATGCTTATAGAATTGAGT
CACCAGATCCAGAAAGAAGAAAAGATTCTGGAAAAGTGTAAATTCAAATTAAGTATCA
AGAAGACTTACCATCAATGTTGATCTTAAGTGGTTGACTGCAGGCATGCTTATGAC

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FIGURE 555

CCTTATTTCCATTCAAATGGCAGCCAGNATAAAATTNATTCCCACAATTCCCTTAANG
GTAAGGGTTGCCCTTNCCGCAATGCCCTCACATGGTTCTTGGNCAGTCGGAAGCCCTTG
GGNTCTTGATGGCTTGTCTAGTAATAATGCAGGGTGCTCAAGGAAATAATTCA GTGTGG
ATATACTGAAAAC

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FIGURE 556

GGTCCGGAATAAGCATTAGCAATCCTGCTGTATCCAGGCCTTATTTTATAGACTATGGA
CATTTCAATATAATTCTGTGAGTCTGGCTTGCTTGTGGGTGTTCTTGGAAATATCTGT
GACTGCGACCTCCTAGGGTCACTGGCATTGNTTAGCTATAAATTATAAACAGATGGAACCT
TACCACGCCCTGCCATTTTGCTTTACTTGGCAAGTGTAAAGGCTCAAAGGA
AAGGGGTTGTGTTGCTAGTTAAGCTAGCTTGTATTGTTGGCTTCCTCGTTCTGCTGG
CTGCCATTCTTACAGAAAGGAACAAACCCCTGCAGGTTCTAAGAAGACTCTTCCCAGGTTGAT
CGTGGATTATTGAGGATAAAGTAGCCAATATTGGTGCAGCTCAATGTCTTTGAAGATT
AAGGATATTGCCCCACGTACATCCAATTATAATGAGCTTGTACGTTTGAGCCTG
CTTCCTGCATGCATAAAATTAAATACCTCAGCC

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FIGURE 557

AAATCTTCTTGAGCTTGTTGAGATGTAGTGAGTTAACCTATAAACC GTTCATTCTTT
GGGTNTTGT TTTATGATTATTAGACAGATATGAAGGAGTGCTTAGTCCAGGANTAATTATT
CCTCACCACTGAGGCAAGACTTCTGTGGACTCTGTTGAATGTTCCATGAATTAATAGTTTC
CCAGTTGGCTAGTGGGAACAGATACTATTCCCTGGCTTGATGAGTATCAGGCCCTGTTCCC
TCCCATTGTTCTGATGTTCTGGATTCTCATAGTTCCATATGCATATGCTGATC
AGTTATCTGGTGAATGCTTGAGAGAAGATCTCTATAGACCTCTGGGGTTCTTTCTATGCAAC
TGTCTCCTCTCAGCATTCTGTGCAGTTATTCCCTGCTGCTTTCTCCTGGCTCTTAAC
TTCTCTTCCAACTCAGGAGTCAGCTGAGATTGCCCTCAGTTGCCAC

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FIGURE 558

TTGCCCTTGGGAGTAAACCTTGAATNATTAAAAACNACGGTTAACCTTGGCNACCG
TTGGGTTGAGGCCTTGACCACCTTGGGACACCNTGCAAGAGGANTCCAACCCNAAACAACAA
CCAGGATGTGCTCCNAGCCCAGCCCCGGGNTTCAGTNCCATANTTGCATGTGTCTGTCCAG
ATNTGGGTTGAGCBBBBBGTGGGNTGCAACCCAGTGGATTGGGTACCCGGCAGACTTAGG
GAAGGTGAGGCAGAGTGGGAGTTGGCAGAATCCCCATACCTCGCAGATTGCTGAGTCTGTC
TTGTGCAGAGGGCCAGAGAATGGCTTATGGGGCCAGGTGGATGGGAAAGGCTAATGGGG
TCAGACCCACCCCGTCTACCCCTCCAGTCAGCCCAGCGCCATCCTGCAGCTCAGCTGGGAG
CATCATTCTCCTGCTTGTACATAGGGTGTGGTCCCCTGGNANGTGGCCACCATCATGTCTAG
GCCTATGCTAGGAGGCAAATGCCAGGCTCTGCCTGTGTTTCTCAACACTANTTTCTGAT
ATGAGGGCAGCACCTGCCTCTGAATGGAAATCATGCAACTACTCAGAATGTGCCTCCTCAT
CTAATGCTCATCTGTTAATGGTATGCCTCGCGTACAGGATCTGGTACCTGTGCAGTTGTG
AATAACCCAGAGGTTGGCAGATCAGTGTCTAGT

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FIGURE 559

ATCCGGCTGGGATACAATTTCATCTTCCATTNACTCTTGCAATTCCACCTTTAAGAAGA
CAGCNTNTCATTCTGAGGCATGAAAATTCTCCAGGGACAAAGCCATGCNTCAGTNACATGTG
TGTGCAGAGAGAAATGCACCTGTNTATCTAAGGGTAGATTTGATCCCTGAATAATTCAATTG
ACTAAACTGACCTCTTCCTCCTGGCTAAATAAAATTAAATTTGCTGGCTCTCTCAGCGGTT
TCTATTTGTAAATTGCTGCATGACCAAAATAGCCCCANTCAAATCAATTGGATTAATNTTA
ATGGTTTGGTGGATGAATATTCTGGATGAATATAAAATGTGCTGCCCTCACAGATGACAC
CACTCCCCTGTCAATCATAGCACATGTGTACTTTTATTGTTACTTAATAGTGATGGATTG
ACTTTCTATCCTCATACTCTTCCTGTTCTTGTACAATTGCATGCAGGAGGGCTGG
ATGCCAGGGTTAACAGAGAGAAATTGACAAGGAAGGTAAAATTGGTTCAAATGAGCATGTG
CCCACAGCCTTAGTCTCCC

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FIGURE 560

CCGGGAAATTAAGCCCTTTTTTTCAAATAATAAAAAGCTTCGAAATTGAAAGGGAGAAG
TAAATATNCCGGATACCATGATTAATATGTAGAAATTNTAAGAGATTNCACCAACCATTAAAG
ATAAAAGCCAGTCACCAAAGTNAAGGATGNAAGATCAGTGTACATAATCTGTTTATTCC
ATATACTTGCAAAGAGGAATCCAAAACTGAGATTGAGGAAAGCATATATAATAGCATCAAAA
AGTAGTACAAAACATATACTCTGAAAACGCAGAATGTTGAGAGAAATTAAATAAGTAAATAG
ATAATCCCATGTCATCTAGCCAGAGGACTCATGTATTTGGTTATTAACCCCTGATCAGATG
TATGGTTTGCAAATATTTCTCCCATTCATACATGGCTCTCATTCTGTTGATTGTTCTCT
TCCTGTACAGAAGTTTAAGTTCATATATAATTAGTGGTCTATTTTGCCCTCGTTCCC
TATGCTGTGGGGTCATATCTAAAAAGGTATCGTGCAGACCAACGTATGGAGATTTCCC
TGTGTTCCAGTAGTTACAGTTGGGTCTACATATAAGTTGTTCTTTTCGAGA
TGGAATCTTGCTCTGCGG

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FIGURE 561

AAAAAAAAAAAAAGGGCGGCCGCGACTCTAGAGTCGACCTGCAGGGTTTATCCAAAAT
GAAATGGTGGGCACCAAAGAGACAGAAACCCACAAGTCAACCACCTAGGTACACATGGTTC
TGAAAGTCCTATACTGTTCTGGATTCCCAGGCACAGAACTCCGGGCTGCTCAGGAAGAGACTA
TGATTCTTCCACCTGCCAGCTACTATTGCCATCCCTCTCATTGCTTAGCTCCAGCCTTC
TCATCCAATTCTCTATTCTACATTGTTATTCTAACCCATTGTGTGCTGGAAATCAAACCA
CTCAGCA

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FIGURE 562

CCACCGCGTCCGNTGGTGGCTTCAGAAGAAATTCTCAACACCTAGCTGCCAGAGAGTCTATG
TATGGGATTGAACAATCTGTAAACTAAAGGATCCTAATCATGAAAATAAGTATGATAAATTAT
AAGTCACTATTGGCACTGTTGTTATATTAGCCTCCTGGATCATTACAGTTTCCAGAAC
TCCACAAAGGTTGGTNTGCTCTAAACTTATCCATCTCCCTCCATTANTGGAACAACTCCACA
AAGTCCTTATTCCCTAAAACACC

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For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

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WO 01/07611 A3

(54) Title: NOVEL POLYNUCLEOTIDES AND METHOD FOR THE USE THEREOF

(57) Abstract: The present invention is directed to novel polynucleotides and to polypeptides encoded thereby. Also provided herein are vectors and host cells comprising those nucleic acid sequences, chimeric polypeptide molecules comprising the polypeptides of the present invention fused to heterologous polypeptide sequences, antibodies which bind to the polypeptides of the present invention and to methods for producing the polypeptides of the present invention.

INTERNATIONAL SEARCH REPORT

International Application No PCT/US 00/20006

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7	C12N15/12	C07K14/47	C12N1/21	C12N1/15	G01N33/68
		C07K16/18			

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, MEDLINE, STRAND

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMHUM1 [Online] EMBL Heidelberg, Germany; AC/ID AC007052, 15 March 1999 (1999-03-15) BIRREN B ET AL.: "Homo sapiens chromosome 18, clone hRPK.411_H_24" XP002152824 see nucleotides 60050-61000 abstract ---	1-24
A	WO 97 07198 A (GENETICS INST) 27 February 1997 (1997-02-27) the whole document ---	
A	EP 0 834 563 A (SMITHKLINE BEECHAM CORP) 8 April 1998 (1998-04-08) the whole document ---	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/20006

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 (1996-07-16) the whole document ---	
P,X	DATABASE EMHTG23 [Online] EMBL Heidelberg, Germany; AC/ID AP001569, 31 March 2000 (2000-03-31) HATTORI M ET AL.: "Homo sapiens 177,097 genomic DNA of 18q21" XP002152825 see nucleotides 21800-22350 abstract -----	1-24

INTERNATIONAL SEARCH REPORT

Ir. International application No.
PCT/US 00/20006

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Invention 1. : claims 1-31 partially

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-31 partially

An isolated nucleic acid molecule as in SEQ ID NO: 1. A method of detecting the presence of a cDNA molecule which encodes a mammalian polypeptide, a vector and a host comprising said nucleic acid. A polypeptide encoded by said nucleic acid, an antibody which binds to said polypeptide.

Invention 2-562: claims 1-31 partially

same as invention 1 but comprising SEQ ID NO: 2-562 (wherein invention 2 comprises SEQ ID NO: 2, invention 3 comprises SEQ ID NO: 3, ... and invention 562 comprises SEQ ID NO: 562)

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. Application No
PCT/US 00/20006

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9707198	A	27-02-1997	US 5707829 A		13-01-1998
			AU 727480 B		14-12-2000
			AU 6712396 A		18-02-1997
			AU 727489 B		14-12-2000
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			CA 2229208 A		27-02-1997
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			EP 0851875 A		08-07-1998
			JP 11510045 T		07-09-1999
			US 6043344 A		28-03-2000
			WO 9704097 A		06-02-1997
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